

XXI. Researches on Solar Physics.—No. II. *The Positions and Areas of the Spots observed at Kew during the years 1864, 1865, 1866, also the Spotted Area of the Sun's visible disk from the commencement of 1832 up to May 1868.* By WARREN DE LA RUE, Esq., D.C.L., V.P.R.S., F.R.A.S., BALFOUR STEWART, Esq., LL.D., F.R.S., F.R.A.S., Superintendent of the Kew Observatory, and BENJAMIN LOEWY, Esq., F.R.A.S.

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20. IN a paper presented to the Society and published in the Philosophical Transactions for 1869 (vol. clix. p. 1), we have given a full description of the method adopted by us for ascertaining the positions and areas of the various sun-spots observed at Kew, and we have likewise, in Tables II. and III. of that paper, given the areas and the positions determined after the method described by us, for the various sun-spots of the years 1862 and 1863. In the present paper we give the same elements for the years 1864, 1865, and 1866, forming Tables II. and III., so that these Tables in our present paper form a continuation of the Tables bearing the same number in our previous paper.

We have stated elsewhere that HOFRATH SCHWABE, of Dessau, had very generously put into our hands the valuable collection of drawings of the solar disk made by him during the course of about forty years, and thus it became an object of importance to us to fix upon some method of testing the value of these drawings, and of extracting from them what information they might contain.

Method of examination of SCHWABE'S drawings.

21. A cursory inspection of these drawings revealed the existence of several progressive stages in accuracy of delineation, from the time of their commencement in 1825 to that of their termination in 1867. By the commencement of the year 1832 the indefatigable observer had evidently matured his system to such an extent as to give (no doubt, with considerable precision) the shape and area of each group, although it was not until the commencement of 1840 that he had finally fixed upon that exceedingly good system of delineation which he thenceforth pursued up to the time when he discontinued his observations.

Between the latter part of 1832 and the beginning of 1840 the circle representing the solar disk had in these drawings a diameter equal to 2·08 inches nearly, while after 1840 this was very slightly increased, being sometimes as great as 2·15 inches. There was thus no material alteration in the scale from the latter part of 1832 up to the end of

the series; and although in the beginning of 1832 the size of the disk was slightly less, being about 1.80 inch, we have thought it unnecessary to take account of this. We have therefore supposed that for all the observations of SCHWABE discussed in this research the scale of delineation remained unaltered.

Previous to 1840 the disk was divided into four quarters by a vertical and horizontal diameter, but after 1840 there were drawn in addition four other lines forming a square inscribed in the circle, and having horizontal and vertical sides, and this square was by means of the two diameters cut into four smaller squares. It is possible that by this arrangement the position of a group on the solar disk might be more accurately ascertained; nevertheless we have not hesitated to commence our research from the year 1832.

22. From 1832 to 1854 SCHWABE has the merit of being the only systematic observer of the solar disk. In November 1853 CARRINGTON began his observations, while in February 1862 the Kew Heliograph was in regular operation under the direction of Mr. WARREN DE LA RUE. Adopting the photographic pictures taken with the Kew instrument as the standard of accuracy, we have already shown that CARRINGTON'S results are almost equally trustworthy. It will therefore be necessary to compare SCHWABE'S results with those of CARRINGTON and with the Kew series in order to test their accuracy.

23. In reducing SCHWABE'S drawings we proceeded in the following manner. Selecting an arbitrary scale, the same individual measured in terms of the scale the area of every group given by SCHWABE, and occasionally during the operation (which occupied some time) he took pains to ascertain that his mode of estimation remained unaltered. We were thus furnished with a series of results which were probably affected throughout with the same personal peculiarity, but which, being founded upon an arbitrary scale, it was necessary to connect by means of a proper multiplier with that scale which we have hitherto adopted, of which the unit is one-millionth of the sun's visible hemisphere.

24. The following Table will elucidate this step in the process of reduction.

TABLE IV.—Comparison of results derived from SCHWABE by the arbitrary scale, with simultaneous results derived from CARRINGTON'S observations and from the Kew series.

Date.	Schwabe.	Carrington.	Date.	Schwabe.	Kew.
1854.			1862.		
Dec. 1-15	2.7	105	April 20 to May 1.....	11.9	698
Nov. 16-30	9.5	565	1863.		
Sept. 1-15	3.4	215	Jan. 1-15	21.6	1511
Sept. 16-30	2.3	138	Jan. 16-31	15.7	901
1859.			May 1-15	13.5	622
Dec. 1-15	18.2	1222	May 16-31.....	13.3	812
Dec. 16-31.....	16.4	1060			
	52.5	3305		76.0	4544

From the left-hand series we derive 65 as the multiplier to be applied to SCHWABE'S

results, while from the Kew series we derive 60. On the whole, we have adopted 60 as the most probable multiplier, and by this number the measurements deduced from SCHWABE, according to the arbitrary scale, have been multiplied in order to bring them to agree with the Kew scale, of which the unit is one-millionth of the sun's visible hemisphere.

25. Applying this multiplier to each of the fortnightly results from SCHWABE exhibited in Table IV., and considering CARRINGTON and Kew as absolutely accurate, we obtain the following Table, which gives a general idea of the trustworthiness of a fortnight's observation of SCHWABE.

TABLE V.

No. of series.	Date.	Schwabe $\times 60$.	Standard.
1854.			
1.	Dec. 1-15	162	105
2.	Nov. 16-30	570	565
3.	Sept. 1-15	204	215
4.	Sept. 16-30 ..	138	138
1859.			
5.	Dec. 1-15	1092	1222
6.	Dec. 16-31.....	984	1060
1862.			
7.	April 20 to May 1.....	714	698
1863.			
8.	Jan. 1-15	1296	1511
9.	Jan. 16-31	942	901
10.	May 1-15	810	622
11.	May 16-31.....	798	812

This is we think a very satisfactory result, showing that the mean spotted area derived from a single fortnight of SCHWABE is never probably far from the truth.

If instead of a single fortnight we take the mean of six fortnights, we derive the following Table:—

TABLE VI.

Series.	Schwabe, mean of 6 fortnights.	Standard, mean of 6 fortnights.
1-6	525	551
2-7	617	649
3-8	738	807
4-9	861	921
9-10	973	1002
10-11	924	934

which exhibits the very great trustworthiness of the means of six fortnights, or three months of SCHWABE's observations.

26. We ought to add that, in estimating the spotted area of the various groups from SCHWABE's pictures, we applied an approximate multiplier on account of foreshortening when the group was near the limb; but this was a part of the process on which we

esteemed it superfluous to spend very great labour, inasmuch as we came to the conclusion that the distances from the centre of the various groups, as recorded by SCHWABE, were not sufficiently precise to warrant very great refinement in the mode of estimating the foreshortening. We have not therefore attempted to make use of SCHWABE'S observations for the purpose of determining whether there be any law regulating the behaviour with regard to increase or diminution of the groups as they pass across the disk of the sun, such as we have elsewhere attempted to deduce from CARRINGTON'S observations, but we have confined ourselves to estimations of the spotted area of the whole visible disk.

We ought also to add that, in preparing our fortnightly mean values, those for the days in which the sun's disk was not observed, were obtained by interpolation, so that in Table V. the differences between the fortnights of SCHWABE'S series and simultaneous fortnights of CARRINGTON'S and of the Kew series may be partly accounted for by the fact that the days of observations at Dessau were not the same as those in this country. In fine, the differences registered in the Table include the uncertainty occasioned by interpolation, as well as that occasioned by the method of observation.

Description of Tables and Plate.

27. In addition to fortnightly values we have given three-monthly values for every fortnight, each of the latter being the mean of the three fortnightly values which precede, and of the three which follow it.

We have given these three-monthly means in addition to the fortnightly means, inasmuch as our experience has led us to conclude that in the former while we get rid of fluctuations of extremely small period, we yet preserve the most striking peculiarities which characterize the progress of solar disturbance.

These three-monthly means form the curve in black which accompanies this paper.

The dotted curve is obtained from the black by a simple process of equalization analogous to that described by the Astronomer Royal (Phil. Trans. 1863, p. 619), that is to say, the middle points of the various inclined black lines were joined together forming a curve of a smooth character, which by a repetition of the same process gave us the dotted line which indicates the larger or so-called eleven-yearly period of solar disturbance.

In Table VII. we have the various fortnightly means forming the first column for each year, and the three-monthly means forming the second column. For convenience' sake, in the margin of this Table each month is supposed to be capable of division, without much error, into four weeks ending on the 7th, the 14th, the 21st, and the 28th days of the month. The single fortnightly values are assumed to correspond in epoch to the 7th and 21st days, while the three-monthly values on the other hand correspond to the 14th and 28th. All those fortnightly values inclosed in brackets without an asterisk are interpolated. Those inclosed in brackets, and having an asterisk, are derived from SCHWABE'S observations; they occur during the time when CARRINGTON had left off and before the Kew series had regularly commenced, and also during the time when the Kew

photoheliograph was in the process of removal from Mr. DE LA RUE's observatory at Cranford to the Kew Observatory.

The observations up to the end of 1853 are those of SCHWABE, those from the beginning of 1854 to the end of 1860 are those of CARRINGTON, while the remainder constitute the Kew series, with the exception of those bracketed and having an asterisk, which are derived from SCHWABE.

In Table VIII. we have for every fortnight (beginning with January 14th of each year) the readings of the equalized curve or that exhibited by a dotted line. It is proper to remark that, in order to obtain these readings, this curve was first laid down on a very much larger scale than that exhibited in the accompanying Plate.

Results of Reduction.

28. From Table VIII. we obtain the following epochs for the minima and maxima of the longer period of solar disturbances:—

Minimum	Nov. 28, 1833
Maximum	. . . . . Dec. 21, 1836
Minimum	Sept. 21, 1843
Maximum	. . . . . Nov. 14, 1847
Minimum	April 21, 1856
Maximum	. . . . . Sept. 7, 1859
Minimum	Feb. 14, 1867

We deduce from these numbers, in the first instance, the fact of the variability of the length of the whole period

Thus we have from first to second minimum	. . . . . 9.81 years.
from second to third	„ 12.58 years.
from third to fourth	„ <u>10.81 years.</u>
Mean of the three periods	. . . 11.07 years.

Secondly, we see that in all of the three cases the time from a minimum to the next maximum is less than that from a maximum to the next minimum,—a fact which has, we think, been previously noticed by Sir J. HERSCHEL. Thus the time from the first minimum to the next maximum is 3.06 years, and from the first maximum to the second minimum 6.75 years. In like manner that from the second minimum to the next maximum is 4.14 years, and from the second maximum to the third minimum 8.44 years. Finally, the time from the third minimum to the third maximum is 3.37 years, and from the third maximum to the fourth minimum 7.44 years. We see again that the second curve, which was longer in period as a whole than either of the other two, manifests this excess in each of its branches, that is to say, its left or ascending branch is larger as a whole than the same branch of the other two curves, and the same takes place for the second or descending branch. On the other hand, the maximum of this curve is not so

high as that of either of the other two—in fact the curve has the appearance as if it were pressed down from above, and pressed out laterally so as to lose in elevation what it gains in time.

Lastly, after undergoing the process of equalization which has been described, there is still the appearance in all the three curves of a secondary maximum in the second branch; and this peculiarity has induced us to compare the solar curves with the curves of brightness of two variable stars, the peculiarities of which have been well determined. We annex with this purpose the light-curve of *R. Sagittæ* (Plate XXXI. fig. 1) determined by BAXENDELL, showing like the sun's spot-curve a secondary maximum in the second branch of the curve; and we also exhibit the light-curve of β Lyræ (fig. 2) determined by POGSON from the observations of ARGELANDER, exhibiting two maxima, which are, however, both of the same value as well as can be estimated.

29. We were induced to imagine from our preliminary researches that the amount of spotted area may possibly be influenced by the positions of the planets in such a way as to exhibit excessive solar action when two influential planets are together at the same ecliptical longitude; we therefore resolved to test this hypothesis by the series of results which we have just described. As the two most influential combinations, we have selected that of Venus and Jupiter, and that of Venus and Mercury. With regard to the former combination, or that of Venus and Jupiter, as the period is about eight months, the influence, if any, would not be materially equalized by the three-monthly means, and it might therefore be expected to appear in the black curve which represents these means, separated to a great extent from any influence of shorter period, such as that due to conjunctions of Mercury and Venus.

Any influence due to the relative positions of Jupiter and Venus might therefore be supposed to show itself in the curve of three-monthly means, and any due to the relative positions of Venus and Mercury in the fortnightly curves.

Viewing, therefore, the dotted curve as the normal line which equalizes all the inequalities of short period, including that which may be due to the relative positions of Jupiter and Venus, we have laid down the departures of the black curve from the dotted one for every fortnight of the whole series of observations; and joining all these into a curve, we have found from it the united values of the departures corresponding to those times when Venus and Jupiter were between 0° and 30° of one another, or between 30° and 60° , between 60° and 90° , and so on.

There are in all fifty-four periods.

30. In like manner, if we take the three-monthly curves as equalizing any influence due to the relative positions of Venus and Mercury, and lay down the departures of the fortnightly means from the corresponding three-monthly means, we are thus furnished with another set of departures which we may suppose likely to exhibit any influence due to the relative positions of Venus and Mercury. But these departures of very short period will no doubt embody, as well as inequalities due to physical causes, others

due to the fact that large groups come abruptly into view, and depart abruptly from the disk of the sun, so that a high positive departure for one fortnight is sometimes followed by a negative one for the next.

We have endeavoured to eliminate the effect of this source of inequality by the following means. Suppose, for instance, that the departures for the beginning of 1850 are as follows:—

(1)	January	7	.	.	.	.	+194
(2)		21	.	.	.	.	— 66
(3)	February	7	.	.	.	.	— 68
(4)		21	.	.	.	.	+ 36
(5)	March	7	.	.	.	.	+228
(6)		21	.	.	.	.	— 13

we should, by taking the mean of (1) and (2) of (2) and (3), and so on, form a second series as follows:—

January	14	.	.	.	.	.	+ 64
	28	.	.	.	.	.	— 67
February	14	.	.	.	.	.	— 16
	28	.	.	.	.	.	+132
March	14	.	.	.	.	.	+107

If this operation be repeated once more, we obtain results which, without any further attempt at equalization, may be formed into a series of short-period curves, which may be taken to be due to some physical cause, and from which we may hope to discover traces of the action of Mercury if such exist.

We have, as in the previous case, taking this curve as our basis, found the united departures for those times when Mercury and Venus are between 0° and 30° of one another, between 30° and 60° , and so on. There are in all ninety periods of this nature.

31. The results of our investigation regarding planetary influence are exhibited in the following Table:—

TABLE VI *a*.

Angular separation between	Excess or deficiency.	
	Jupiter and Venus.	Venus and Mercury.
0° and 30°	+ 881	+1675
30 " 60	— 60	— 139
60 " 90	— 452	—1665
90 " 120	— 579	—2355
120 " 150	— 705	—2318
150 " 180	— 759	—1604
180 " 210	— 893	— 481
210 " 240	— 752	+ 547
240 " 270	— 263	+ 431
270 " 300	+ 70	+ 228
300 " 330	+ 480	+1318
330 " 360	+1134	+2283

From this Table it would appear that these observations so treated exhibit for Jupiter and Venus an excess of solar activity when these two planets are together, and a deficiency when they are apart, and that the same kind of influence, slightly modified in form, is exhibited in the case of Venus and Mercury.

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Since writing the above we have thought it worth while to investigate, after the manner we have described, the influence, if any, upon solar disturbance of the relative positions of Mercury and Jupiter, and also that of Mercury alone in its varying distances from the sun, and we have obtained the following results:—

TABLE VI *b*.

Angular separation* between	Mercury and his Perihelion (Perihelion = 0).	Mercury and Jupiter.
0 and 30	— 380	—227
30 „ 60	—1188	—317
60 „ 90	—1287	—594
90 „ 120	—1262	—714
120 „ 150	—1208	—508
150 „ 180	—1027	—491
180 „ 210	— 519	—416
210 „ 240	+ 430	—189
240 „ 270	+1082	— 25
270 „ 300	+1436	+154
300 „ 330	+1282	+164
330 „ 360	+ 586	— 45

The numbers in the above Table are smaller than those in the Tables already given; but this may be owing to the method of equalization we have adopted, which will necessarily tell very greatly in small periods.

Nevertheless there appears to be a certain amount of likeness between the march of the numbers in the four periods which we have investigated, namely, those of Venus and Jupiter, Venus and Mercury, Mercury and his Perihelion, and Mercury and Jupiter.

We desire to record this rather as a result brought out by a certain specified method of treating the material at our disposal, than as a fact from which we are at present prepared to draw conclusions. As the investigation of these and similar phenomena proceeds it may be hoped that much light will be thrown upon the causes of sun-spot periodicity.

July 11, 1870.—Sir J. HERSCHEL has kindly permitted us to append the following remarks which he has made upon the foregoing paper:—

* In all the above Tables equal angles have been supposed to be described in equal times; there will be a slight correction on this account for Mercury and his Perihelion.

“The curves, as delineated for the three complete periods embraced, are highly interesting and instructive. They place in a very clear and unmistakable light the anticipation in point of time of the occurrence of the maximum of maculiferous excitement before the middle of the total period which the present rapidly increasing number of spots actually in progress seems to promise fully to confirm for the period (1866·6–1877·7); and here I cannot help observing that although the lengths of the three periods here embraced vary between 9·81 and 12·68 years, yet the mean of the three is almost exactly 11·1, and this agrees with the whole course of the solar history since 1800, which was a year of maximum. Another point of much interest is the evaluation of the spotted area in numerical aliquots of the solar surface, showing to how very small an extent the sun is entitled to the character of a variable star (in so far at least as diminution and increase of illuminated area are to be regarded as causes of variability). The total fluctuation arising from this cause it appears does not exceed about 2000 parts in a million, or about $\frac{1}{500}$ part of the total light, which in estimating the brightness of a star would be quite inappreciable*. The tendency to a double maximum, an earlier and a later, pointed out as analogous to those observed in β Lyrae and R. Sagittae, it may be worth noticing, has a similar though less strongly marked analogous feature in the light curve of η Argus, as laid down for a periodic variation sixty-seven years in duration by Professor LOOMIS, which presents a subordinate maximum (followed by a rather marked depression) at about the twenty-sixth year, the principal one being deferred to the forty-fourth of the total period; and this law is observed in three successive periods.”

It has also been suggested to us by Sir W. THOMSON, in connexion with that part of our paper which refers to the possible connexion between sun-spots and planetary position, to take arbitrary periods, viz. three-fourths of the planetary period, which we have taken, and to compare the results of these with the results derived in our paper. We have done this in the case of Venus and Jupiter, and also in that of Venus and Mercury, and have obtained the following numbers:—

Three-fourths of the period of Venus and Jupiter.	Three-fourths of the period of Venus and Mercury.
— 117	— 184
— 287	— 754
— 694	— 1621
— 631	— 1196
— 461	+ 567
— 140	+ 1764
+ 441	+ 848
+ 310	— 466
— 139	— 605

* We have not lost sight of the very small amount of variation in the brightness of the solar surface attributable
MDCCCLXX.

It will be seen from these numbers that the curves derived from these arbitrary periods are both less marked than the corresponding curves derived from the full periods, although the number of series summed together has been increased in the proportion of four to three.

In conclusion, we may state that when we proposed that the present series of observations should terminate in February 1872, we were under the impression that the period was nearer ten than eleven years. The results of this paper would tend to show that the period is over eleven years; nevertheless we do not propose an extension of our series, for we think that the maximum will probably be reached before the proposed termination.

We ought also to state that in all probability the disturbances which we have hitherto registered are only those which occur in the lower regions of the sun's atmosphere. It is therefore our intention to supplement our research on sun-spots with an evaluation of the faculæ or bright patches, which are also signs of solar disturbance, but which occur in the higher and not in the lower regions of the solar atmosphere. The best method of doing this is at present engaging our attention.

to the variation in the number of spots, and we have had it in contemplation to make direct observations of variability in the actinism of the sun in order to ascertain whether the period of greatest brightness is or is not coincident with that of the maximum of spotted area; for it is not improbable that the sun may be the most brilliant when most spotted.

A thorough examination of the solar photographs will no doubt do much to elucidate the subject, but these have the disadvantage of only representing with the greatest distinctness the faculæ which are nearest the limb; on the other hand direct actinic observations are interfered with by the ever varying conditions of the earth's atmosphere, and also by the variations of the sun's meridian altitude, so that it will be necessary to combine both methods of observation.

TABLE VII.—Solar Spotted Area (in millionths).

Column I. contains the fortnightly means, Column II. contains the means of the three fortnights preceding, and the three following the date.

		1832.		1833.		1834.		1835.		1836.		1837.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	72	.....	12	.....	18	.....	132	.....	930	.....	2124	.....
	14.	.....	.....	.....	183	.....	135	.....	249	.....	1195	.....	2081
	21.	318	.....	294	.....	6	.....	66	.....	1134	.....	2412	.....
	28.	.....	.....	.....	165	.....	95	.....	298	.....	1193	.....	1983
February	7.	210	.....	102	.....	276	.....	354	.....	1350	.....	2028	.....
	14.	.....	450	.....	152	.....	96	.....	222	.....	1205	.....	1836
	21.	726	.....	282	.....	258	.....	246	.....	1944	.....	2052	.....
	28.	.....	509	.....	153	.....	98	.....	329	.....	1314	.....	1693
March	7.	666	.....	132	.....	6	.....	486	.....	954	.....	1272	.....
	14.	.....	477	.....	106	.....	97	.....	445	.....	1380	.....	1436
	21.	708	.....	90	.....	12	.....	48	.....	918	.....	1128	.....
	28.	.....	543	.....	92	.....	51	.....	539	.....	1390	.....	1203
April	7.	426	.....	18	.....	30	.....	774	.....	1584	.....	1266	.....
	14.	.....	530	.....	55	.....	27	.....	563	.....	1290	.....	1027
	21.	126	.....	12	.....	0	.....	762	.....	1530	.....	870	.....
	28.	.....	489	.....	33	.....	38	.....	633	.....	1356	.....	926
May	7.	606	.....	18	.....	0	.....	918	.....	1410	.....	630	.....
	14.	.....	434	.....	18	.....	68	.....	684	.....	1444	.....	984
	21.	648	.....	60	.....	114	.....	390	.....	1344	.....	996	.....
	28.	.....	395	.....	36	.....	72	.....	683	.....	1448	.....	982
June	7.	420	.....	0	.....	72	.....	906	.....	1350	.....	966	.....
	14.	.....	388	.....	37	.....	86	.....	723	.....	1465	.....	956
	21.	378	.....	0	.....	192	.....	354	.....	1446	.....	1176	.....
	28.	.....	304	.....	36	.....	87	.....	771	.....	1400	.....	972
July	7.	192	.....	126	.....	54	.....	768	.....	1608	.....	1254	.....
	14.	.....	199	.....	31	.....	72	.....	941	.....	1360	.....	930
	21.	84	.....	18	.....	84	.....	1002	.....	1632	.....	714	.....
	28.	.....	150	.....	47	.....	85	.....	1058	.....	1317	.....	935
August	7.	102	.....	12	.....	6	.....	[1206]	.....	1020	.....	[726]	.....
	14.	.....	88	.....	65	.....	91	.....	1233	.....	1214	.....	862
	21.	18	.....	30	.....	24	.....	[1410]	.....	1104	.....	744	.....
	28.	.....	72	.....	75	.....	87	.....	1220	.....	1153	.....	754
September	7.	126	.....	96	.....	150	.....	1608	.....	1092	.....	996	.....
	14.	.....	79	.....	79	.....	166	.....	1224	.....	1208	.....	903
	21.	6	.....	108	.....	228	.....	1404	.....	828	.....	738	.....
	28.	.....	96	.....	99	.....	197	.....	1235	.....	1267	.....	953
October	7.	96	.....	186	.....	30	.....	690	.....	1242	.....	606	.....
	14.	.....	118	.....	98	.....	241	.....	1212	.....	1369	.....	911
	21.	126	.....	42	.....	558	.....	1026	.....	1962	.....	1608	.....
	28.	.....	137	.....	123	.....	248	.....	1105	.....	1497	.....	1011
November	7.	204	.....	132	.....	192	.....	1272	.....	1374	.....	1026	.....
	14.	.....	164	.....	106	.....	294	.....	1012	.....	1694	.....	1113
	21.	150	.....	24	.....	288	.....	1272	.....	1716	.....	492	.....
	28.	.....	150	.....	78	.....	311	.....	1052	.....	1841	.....	1466
December	7.	240	.....	246	.....	192	.....	966	.....	[1860]	.....	1596	.....
	14.	.....	178	.....	72	.....	229	.....	1070	.....	1916	.....	1375
	21.	168	.....	6	.....	504	.....	846	.....	2010	.....	1350	.....
	28.	.....	161	.....	96	.....	256	.....	1083	.....	2025	.....	1418

TABLE VII. (continued).

		1838.		1839.		1840.		1841.		1842.		1843.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	2724	.....	732	.....	726	.....	276	.....	78	.....	150	.....
	14.	.....	1561	.....	965	.....	600	.....	290	.....	219	.....	118
	21.	1062	.....	1362	.....	612	.....	168	.....	186	.....	126	.....
	28.	.....	1488	.....	941	.....	658	.....	277	.....	185	.....	99
February	7.	1284	.....	1212	.....	960	.....	204	.....	228	.....	102	.....
	14.	.....	1410	.....	941	.....	685	.....	211	.....	172	.....	76
	21.	1350	.....	1104	.....	408	.....	222	.....	72	.....	6	.....
	28.	.....	1138	.....	895	.....	648	.....	241	.....	208	.....	53
March	7.	1158	.....	678	.....	774	.....	246	.....	294	.....	60	.....
	14.	.....	1103	.....	774	.....	635	.....	275	.....	215	.....	70
	21.	882	.....	558	.....	630	.....	150	.....	174	.....	12	.....
	28.	.....	1082	.....	670	.....	621	.....	382	.....	193	.....	104
April	7.	1092	.....	456	.....	504	.....	456	.....	294	.....	12	.....
	14.	.....	1032	.....	591	.....	636	.....	440	.....	199	.....	140
	21.	852	.....	636	.....	534	.....	372	.....	228	.....	228	.....
	28.	.....	983	.....	585	.....	607	.....	483	.....	191	.....	151
May	7.	1158	.....	588	.....	876	.....	846	.....	96	.....	306	.....
	14.	.....	945	.....	581	.....	549	.....	533	.....	206	.....	159
	21.	1050	.....	630	.....	498	.....	570	.....	108	.....	222	.....
	28.	.....	883	.....	640	.....	513	.....	518	.....	183	.....	161
June	7.	864	.....	642	.....	600	.....	504	.....	246	.....	126	.....
	14.	.....	923	.....	632	.....	506	.....	474	.....	155	.....	139
	21.	654	.....	534	.....	282	.....	450	.....	264	.....	60	.....
	28.	.....	820	.....	705	.....	462	.....	361	.....	195	.....	103
July	7.	720	.....	810	.....	288	.....	366	.....	156	.....	24	.....
	14.	.....	747	.....	898	.....	466	.....	333	.....	202	.....	90
	21.	1092	.....	588	.....	492	.....	108	.....	60	.....	96	.....
	28.	.....	769	.....	1003	.....	543	.....	305	.....	212	.....	69
August	7.	540	.....	1026	.....	612	.....	168	.....	336	.....	90	.....
	14.	.....	729	.....	1159	.....	608	.....	323	.....	176	.....	61
	21.	612	.....	1788	.....	522	.....	402	.....	150	.....	144	.....
	28.	.....	701	.....	1133	.....	618	.....	327	.....	197	.....	73
September	7.	996	.....	1272	.....	1062	.....	336	.....	306	.....	0	.....
	14.	.....	663	.....	1162	.....	635	.....	336	.....	257	.....	57
	21.	414	.....	1470	.....	672	.....	558	.....	48	.....	12	.....
	28.	.....	682	.....	1076	.....	665	.....	351	.....	282	.....	76
October	7.	552	.....	654	.....	348	.....	390	.....	282	.....	96	.....
	14.	.....	667	.....	855	.....	690	.....	304	.....	306	.....	92
	21.	864	.....	762	.....	594	.....	162	.....	420	.....	0	.....
	28.	.....	638	.....	714	.....	567	.....	331	.....	284	.....	111
November	7.	654	.....	510	.....	792	.....	258	.....	486	.....	204	.....
	14.	.....	662	.....	547	.....	546	.....	280	.....	301	.....	118
	21.	522	.....	462	.....	672	.....	120	.....	294	.....	240	.....
	28.	.....	692	.....	559	.....	534	.....	228	.....	279	.....	124
December	7.	822	.....	426	.....	324	.....	498	.....	174	.....	114	.....
	14.	.....	775	.....	534	.....	463	.....	232	.....	230	.....	148
	21.	558	.....	468	.....	546	.....	252	.....	150	.....	54	.....
	28.	.....	868	.....	609	.....	365	.....	227	.....	166	.....	132

TABLE VII. (continued).

		1844.		1845.		1846.		1847.		1848.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	132	.....	432	.....	300	.....	438	.....	1650	.....
	14.	.....	125	.....	433	.....	700	.....	881	.....	1270
	21.	144	.....	402	.....	948	.....	1038	.....	1098	.....
	28.	.....	122	.....	517	.....	696	.....	936	.....	1206
February	7.	108	.....	354	.....	414	.....	1146	.....	1158	.....
	14.	.....	137	.....	493	.....	734	.....	1033	.....	1058
	21.	198	.....	924	.....	1260	.....	1278	.....	912	.....
	28.	.....	120	.....	597	.....	786	.....	1070	.....	867
March	7.	96	.....	576	.....	618	.....	1332	.....	834	.....
	14.	.....	162	.....	651	.....	792	.....	961	.....	770
	21.	144	.....	270	.....	864	.....	966	.....	696	.....
	28.	.....	177	.....	662	.....	846	.....	852	.....	814
April	7.	30	.....	1056	.....	612	.....	660	.....	504	.....
	14.	.....	172	.....	559	.....	724	.....	714	.....	796
	21.	396	.....	726	.....	984	.....	384	.....	516	.....
	28.	.....	158	.....	547	.....	762	.....	597	.....	835
May	7.	198	.....	420	.....	738	.....	492	.....	1422	.....
	14.	.....	139	.....	539	.....	677	.....	622	.....	844
	21.	168	.....	306	.....	528	.....	450	.....	804	.....
	28.	.....	191	.....	389	.....	647	.....	536	.....	1014
June	7.	12	.....	504	.....	846	.....	430	.....	1068	.....
	14.	.....	179	.....	307	.....	569	.....	612	.....	1141
	21.	30	.....	222	.....	354	.....	1116	.....	750	.....
	28.	.....	219	.....	288	.....	504	.....	677	.....	1035
July	7.	342	.....	156	.....	432	.....	144	.....	1524	.....
	14.	.....	233	.....	276	.....	548	.....	929	.....	1094
	21.	324	.....	234	.....	516	.....	840	.....	1278	.....
	28.	.....	245	.....	201	.....	552	.....	1040	.....	984
August	7.	438	.....	306	.....	348	.....	882	.....	786	.....
	14.	.....	246	.....	231	.....	654	.....	1195	.....	1150
	21.	252	.....	234	.....	792	.....	1962	.....	1158	.....
	28.	.....	239	.....	228	.....	637	.....	1500	.....	1073
September	7.	84	.....	54	.....	870	.....	1296	.....	408	.....
	14.	.....	210	.....	262	.....	602	.....	1634	.....	1098
	21.	36	.....	402	.....	966	.....	2046	.....	1746	.....
	28.	.....	153	.....	254	.....	634	.....	1776	.....	1083
October	7.	300	.....	138	.....	330	.....	1974	.....	1062	.....
	14.	.....	129	.....	244	.....	562	.....	1687	.....	1016
	21.	150	.....	438	.....	306	.....	1644	.....	1428	.....
	28.	.....	127	.....	342	.....	584	.....	1674	.....	1106
November	7.	96	.....	258	.....	540	.....	1734	.....	696	.....
	14.	.....	190	.....	381	.....	487	.....	1597	.....	1102
	21.	108	.....	174	.....	360	.....	1428	.....	756	.....
	28.	.....	212	.....	408	.....	505	.....	1543	.....	1175
December	7.	72	.....	642	.....	1002	.....	1218	.....	948	.....
	14.	.....	254	.....	493	.....	627	.....	1452	.....	1244
	21.	414	.....	636	.....	384	.....	1584	.....	1722	.....
	28.	.....	297	.....	519	.....	728	.....	1356	.....	1315

TABLE VII. (continued).

		1849.		1850.		1851.		1852.		1853.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	1500	.....	864	.....	624	.....	744	.....	420	.....
	14.	.....	1372	.....	633	.....	739	.....	728	.....	455
	21.	1842	.....	600	.....	600	.....	828	.....	348	.....
	28.	.....	1334	.....	698	.....	780	.....	754	.....	406
February	7.	1122	.....	618	.....	1368	.....	498	.....	282	.....
	14.	.....	1215	.....	675	.....	863	.....	696	.....	386
	21.	1098	.....	666	.....	966	.....	852	.....	564	.....
	28.	.....	1151	.....	584	.....	876	.....	718	.....	400
March	7.	720	.....	792	.....	786	.....	528	.....	174	.....
	14.	.....	989	.....	545	.....	884	.....	654	.....	412
	21.	1008	.....	510	.....	834	.....	726	.....	528	.....
	28.	.....	947	.....	501	.....	837	.....	657	.....	425
April	7.	1116	.....	318	.....	702	.....	876	.....	504	.....
	14.	.....	899	.....	451	.....	746	.....	618	.....	404
	21.	870	.....	366	.....	648	.....	444	.....	420	.....
	28.	.....	896	.....	446	.....	714	.....	597	.....	484
May	7.	868	.....	354	.....	1086	.....	516	.....	360	.....
	14.	.....	816	.....	438	.....	681	.....	529	.....	485
	21.	810	.....	366	.....	420	.....	618	.....	438	.....
	28.	.....	778	.....	473	.....	637	.....	425	.....	485
June	7.	702	.....	762	.....	594	.....	402	.....	654	.....
	14.	.....	743	.....	456	.....	585	.....	423	.....	473
	21.	528	.....	462	.....	636	.....	318	.....	534	.....
	28.	.....	682	.....	478	.....	488	.....	405	.....	483
July	7.	888	.....	528	.....	438	.....	252	.....	504	.....
	14.	.....	615	.....	495	.....	523	.....	351	.....	485
	21.	660	.....	264	.....	336	.....	432	.....	348	.....
	28.	.....	610	.....	453	.....	567	.....	362	.....	446
August	7.	504	.....	486	.....	504	.....	408	.....	420	.....
	14.	.....	624	.....	532	.....	597	.....	379	.....	401
	21.	408	.....	468	.....	630	.....	294	.....	450	.....
	28.	.....	573	.....	514	.....	596	.....	405	.....	408
September	7.	672	.....	510	.....	858	.....	468	.....	420	.....
	14.	.....	594	.....	545	.....	647	.....	467	.....	412
	21.	612	.....	936	.....	816	.....	420	.....	264	.....
	28.	.....	651	.....	513	.....	635	.....	519	.....	404
October	7.	582	.....	420	.....	432	.....	408	.....	546	.....
	14.	.....	769	.....	529	.....	630	.....	562	.....	347
	21.	786	.....	450	.....	642	.....	804	.....	372	.....
	28.	.....	724	.....	534	.....	549	.....	562	.....	310
November	7.	846	.....	294	.....	432	.....	720	.....	372	.....
	14.	.....	730	.....	434	.....	592	.....	600	.....	287
	21.	1116	.....	564	.....	600	.....	552	.....	108	.....
	28.	.....	777	.....	468	.....	644	.....	602	.....	209
December	7.	402	.....	540	.....	372	.....	468	.....	198	.....
	14.	.....	746	.....	493	.....	675	.....	526	.....	150
	21.	648	.....	336	.....	1074	.....	648	.....	126	.....
	28.	.....	708	.....	672	.....	686	.....	453	.....	130

TABLE VII. (continued).

		1854.		1855.		1856.		1857.		1858.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	77	.....	373	.....	0	.....	158	.....	1404	.....
	14.	.....	136	.....	269	.....	23	.....	61	.....	591
	21.	19	.....	625	.....	0	.....	19	.....	378	.....
	28.	.....	137	.....	269	.....	9	.....	61	.....	782
February	7.	252	.....	339	.....	35	.....	137	.....	741	.....
	14.	.....	143	.....	264	.....	9	.....	55	.....	837
	21.	142	.....	133	.....	17	.....	5	.....	385	.....
	28.	.....	185	.....	202	.....	13	.....	73	.....	621
March ...	7.	208	.....	103	.....	0	.....	2	.....	1279	.....
	14.	.....	200	.....	99	.....	15	.....	76	.....	618
	21.	159	.....	10	.....	0	.....	6	.....	837	.....
	28.	.....	177	.....	47	.....	9	.....	123	.....	545
April.....	7.	330	.....	2	.....	23	.....	266	.....	106	.....
	14.	.....	156	.....	25	.....	6	.....	187	.....	564
	21.	111	.....	5	.....	12	.....	38	.....	358	.....
	28.	.....	125	.....	9	.....	11	.....	210	.....	484
May	7.	114	.....	26	.....	0	.....	419	.....	305	.....
	14.	.....	122	.....	8	.....	11	.....	220	.....	411
	21.	12	.....	1	.....	0	.....	389	.....	501	.....
	28.	.....	70	.....	7	.....	7	.....	212	.....	528
June	7.	26	.....	11	.....	28	.....	144	.....	796	.....
	14.	.....	68	.....	7	.....	14	.....	246	.....	526
	21.	138	.....	1	.....	0	.....	66	.....	399	.....
	28.	.....	76	.....	5	.....	14	.....	184	.....	523
July	7.	19	.....	0	.....	0	.....	213	.....	810	.....
	14.	.....	78	.....	5	.....	62	.....	141	.....	588
	21.	97	.....	0	.....	58	.....	245	.....	342	.....
	28.	.....	109	.....	3	.....	61	.....	218	.....	696
August ...	7.	165	.....	18	.....	0	.....	46	.....	289	.....
	14.	.....	109	.....	3	.....	62	.....	297	.....	722
	21.	22	.....	0	.....	285	.....	132	.....	889	.....
	28.	.....	135	.....	7	.....	62	.....	316	.....	815
September	7.	215	.....	0	.....	25	.....	603	.....	1448	.....
	14.	.....	130	.....	20	.....	53	.....	338	.....	977
	21.	138	.....	1	.....	2	.....	540	.....	556	.....
	28.	.....	140	.....	19	.....	53	.....	379	.....	1205
October	7.	171	.....	20	.....	0	.....	330	.....	1364	.....
	14.	.....	230	.....	20	.....	11	.....	374	.....	1241
	21.	70	.....	82	.....	3	.....	375	.....	1313	.....
	28.	.....	212	.....	34	.....	8	.....	295	.....	1219
November	7.	223	.....	12	.....	2	.....	295	.....	1657	.....
	14.	.....	196	.....	34	.....	14	.....	289	.....	1309
	21.	565	.....	4	.....	36	.....	101	.....	1110	.....
	28.	.....	229	.....	30	.....	41	.....	468	.....	1489
December	7.	105	.....	82	.....	2	.....	129	.....	1313	.....
	14.	.....	322	.....	17	.....	43	.....	469	.....	1510
	21.	40	.....	2	.....	42	.....	506	.....	1098	.....
	28.	.....	341	.....	21	.....	66	.....	543	.....	1337

TABLE VII. (continued).

		1859.		1860.		1861.		1862.		1863.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	2442	.....	442	.....	[1140*]	.....	[936*]	.....	1511	.....
	14.	.....	1308	.....	1109	.....	1377	.....	1188	.....	883
	21.	1440	.....	1097	.....	[ 810*]	.....	[948*]	.....	901	.....
	28.	.....	1199	.....	1157	.....	1181	.....	1038	.....	959
February	7.	620	.....	1834	.....	[ 588*]	.....	1209	.....	[654*]	.....
	14.	.....	1244	.....	1128	.....	1239	.....	879	.....	969
	21.	934	.....	1003	.....	[1722*]	.....	1215	.....	[960*]	.....
	28.	.....	888	.....	1165	.....	1332	.....	858	.....	820
March ...	7.	661	.....	1474	.....	[1494*]	.....	750	.....	[858*]	.....
	14.	.....	768	.....	1071	.....	1479	.....	823	.....	763
	21.	1367	.....	917	.....	[1680*]	.....	220	.....	[930*]	.....
	28.	.....	869	.....	980	.....	1551	.....	848	.....	758
April.....	7.	306	.....	666	.....	[1698*]	.....	805	.....	[618*]	.....
	14.	.....	861	.....	961	.....	1504	.....	843	.....	733
	21.	718	.....	531	.....	[1692*]	.....	742	.....	[558*]	.....
	28.	.....	904	.....	833	.....	1427	.....	1110	.....	689
May	7.	1230	.....	1289	.....	[1020*]	.....	1356	.....	622	.....
	14.	.....	772	.....	895	.....	1492	.....	1440	.....	573
	21.	884	.....	880	.....	[1440*]	.....	1187	.....	812	.....
	28.	.....	820	.....	1203	.....	1465	.....	1501	.....	589
June	7.	918	.....	708	.....	[1032*]	.....	2351	.....	593	.....
	14.	.....	1210	.....	1423	.....	1368	.....	1776	.....	546
	21.	576	.....	1286	.....	[2070*]	.....	2199	.....	233	.....
	28.	.....	1237	.....	1631	.....	1370	.....	1814	.....	540
July	7.	592	.....	2518	.....	[1536*]	.....	1170	.....	720	.....
	14.	.....	1497	.....	1624	.....	1368	.....	1795	.....	436
	21.	3062	.....	1852	.....	[1110*]	.....	2396	.....	298	.....
	28.	.....	1904	.....	1706	.....	1330	.....	1544	.....	348
August ...	7.	1387	.....	2538	.....	[1032*]	.....	1580	.....	587	.....
	14.	.....	1990	.....	1581	.....	1256	.....	1627	.....	358
	21.	2444	.....	842	.....	[1428*]	.....	1073	.....	183	.....
	28.	.....	2186	.....	1401	.....	1143	.....	1558	.....	338
September	7.	3365	.....	1200	.....	[ 804*]	.....	849	.....	69	.....
	14.	.....	2078	.....	1301	.....	1162	.....	1276	.....	343
	21.	1090	.....	534	.....	[1626*]	.....	2692	.....	292	.....
	28.	.....	2170	.....	1144	.....	1139	.....	1131	.....	316
October...	7.	1765	.....	1443	.....	[ 858*]	.....	759	.....	598	.....
	14.	.....	1951	.....	1213	.....	1158	.....	1123	.....	356
	21.	2414	.....	1251	.....	[1224*]	.....	705	.....	331	.....
	28.	.....	1594	.....	1458	.....	1299	.....	1049	.....	440
November	7.	1941	.....	1597	.....	[ 894*]	.....	708	.....	422	.....
	14.	.....	1589	.....	1591	.....	1223	.....	745	.....	610
	21.	1131	.....	1255	.....	[1542*]	.....	1023	.....	427	.....
	28.	.....	1368	.....	1541	.....	1236	.....	870	.....	766
December	7.	1222	.....	2670	.....	[1650*]	.....	405	.....	573	.....
	14.	.....	1152	.....	1467	.....	1190	.....	903	.....	1004
	21.	1060	.....	1332	.....	[1170*]	.....	869	.....	1312	.....
	28.	.....	1131	.....	1297	.....	1242	.....	894	.....	1090

TABLE VII. (continued).

		1864.		1865.		1866.		1867.		1868.	
		I.	II.	I.	II.	I.	II.	I.	II.	I.	II.
January	7.	[1533]	.....	341	.....	964	.....	0	.....	587	.....
	14.	.....	1163	.....	916	.....	815	.....	2	.....	261
	21.	1755	.....	1777	.....	767	.....	0	.....	25	.....
	28.	.....	1293	.....	821	.....	804	.....	2	.....	266
February	7.	941	.....	980	.....	1108	.....	0	.....	76	.....
	14.	.....	1222	.....	689	.....	779	.....	23	.....	309
	21.	863	.....	254	.....	1239	.....	0	.....	433	.....
	28.	.....	1075	.....	669	.....	655	.....	49	.....	342
March	7.	1352	.....	350	.....	283	.....	12	.....	242	.....
	14.	.....	802	.....	404	.....	553	.....	51	.....	537
	21.	888	.....	437	.....	318	.....	126	.....	490	.....
	28.	.....	706	.....	276	.....	396	.....	54	.....	618
April	7.	654	.....	215	.....	218	.....	160	.....	787	.....
	14.	.....	751	.....	321	.....	221	.....	101	.....	578
	21.	113	.....	187	.....	155	.....	6	.....	1197	.....
	28.	.....	777	.....	362	.....	214	.....	107	.....	.....
May	7.	364	.....	216	.....	162	.....	19	.....	559	.....
	14.	.....	740	.....	295	.....	203	.....	88	.....	.....
	21.	1136	.....	519	.....	187	.....	282	.....	193	.....
	28.	.....	855	.....	277	.....	189	.....	74	.....	.....
June	7.	1505	.....	598	.....	247	.....	52	.....	.....	.....
	14.	.....	945	.....	274	.....	172	.....	73	.....	.....
	21.	671	.....	36	.....	248	.....	8	.....	.....	.....
	28.	.....	1169	.....	316	.....	171	.....	79	.....	.....
July	7.	1342	.....	105	.....	137	.....	76	.....	.....	.....
	14.	.....	1041	.....	295	.....	183	.....	108	.....	.....
	21.	655	.....	172	.....	47	.....	2	.....	.....	.....
	28.	.....	859	.....	239	.....	160	.....	258	.....	.....
August	7.	1708	.....	465	.....	158	.....	55	.....	.....	.....
	14.	.....	763	.....	353	.....	153	.....	362	.....	.....
	21.	364	.....	395	.....	261	.....	[ 457 ]	.....	.....	.....
	28.	.....	566	.....	480	.....	146	.....	433	.....	.....
September	7.	411	.....	259	.....	109	.....	951	.....	.....	.....
	14.	.....	532	.....	499	.....	169	.....	449	.....	.....
	21.	96	.....	723	.....	207	.....	630	.....	.....	.....
	28.	.....	446	.....	477	.....	144	.....	477	.....	.....
October	7.	164	.....	868	.....	92	.....	504	.....	.....	.....
	14.	.....	557	.....	514	.....	119	.....	417	.....	.....
	21.	447	.....	285	.....	190	.....	96	.....	.....	.....
	28.	.....	642	.....	529	.....	103	.....	293	.....	.....
November	7.	1192	.....	330	.....	8	.....	226	.....	.....	.....
	14.	.....	829	.....	487	.....	68	.....	228	.....	.....
	21.	1034	.....	622	.....	108	.....	97	.....	.....	.....
	28.	.....	859	.....	503	.....	53	.....	241	.....	.....
December	7.	920	.....	350	.....	11	.....	207	.....	.....	.....
	14.	.....	1081	.....	583	.....	21	.....	229	.....	.....
	21.	1222	.....	465	.....	0	.....	236	.....	.....	.....
	28.	.....	1046	.....	713	.....	19	.....	204	.....	.....

TABLE VIII.—Table exhibiting the eleven-yearly period of Solar spot activity,
equalized for shorter periods.

	1832.	1833.	1834.	1835.	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.
Jan. 14.	.....	120	55	375	1250	1580	990	790	775	415	265	155	115	295	500	750	1375	890
28.	.....	110	55	415	1265	1555	975	790	760	405	255	150	120	305	510	750	1365	875
Feb. 14.	.....	105	60	450	1280	1515	965	785	745	395	250	140	125	315	515	765	1350	860
28.	.....	100	60	490	1290	1475	955	785	725	390	245	130	130	325	525	780	1320	850
Mar. 14.	.....	95	65	525	1300	1435	945	785	705	385	240	120	140	340	535	815	1290	840
28.	.....	95	70	565	1315	1400	935	790	685	380	235	115	150	350	545	845	1260	825
Apr. 14.	.....	90	75	605	1325	1365	925	800	665	370	230	115	155	355	550	880	1220	810
28.	.....	85	80	645	1335	1330	915	805	645	360	225	110	160	365	555	920	1190	800
May 14.	.....	85	85	690	1345	1300	905	805	620	355	220	110	170	375	565	965	1165	795
28.	.....	80	90	730	1355	1270	900	805	600	350	215	105	180	380	570	1020	1145	785
June 14.	.....	75	100	780	1360	1240	890	810	580	345	210	100	185	390	580	1080	1115	775
28.	305	70	110	830	1370	1215	880	815	560	340	205	100	190	395	590	1140	1095	760
July 14.	285	70	120	875	1380	1185	870	820	545	335	205	95	200	400	600	1200	1070	750
28.	260	65	130	925	1390	1170	860	825	530	330	200	90	205	410	610	1250	1060	740
Aug. 14.	240	60	140	970	1405	1140	850	830	520	325	200	90	215	420	615	1300	1040	730
28.	220	60	150	1005	1425	1120	840	840	500	320	195	90	220	425	625	1330	1020	715
Sept. 14.	205	55	165	1045	1455	1100	830	840	490	315	195	85	230	430	635	1365	1000	705
28.	185	50	180	1080	1480	1080	815	845	480	310	190	85	240	440	645	1390	985	695
Oct. 14.	170	50	200	1120	1510	1065	805	845	470	305	185	90	245	445	655	1405	970	680
28.	155	50	225	1145	1550	1050	800	840	460	300	180	95	255	450	665	1410	960	670
Nov. 14.	145	50	250	1170	1575	1035	800	830	450	295	175	95	265	460	675	1415	945	660
28.	135	45	280	1195	1600	1025	795	820	440	285	170	100	270	475	690	1410	930	650
Dec. 14.	125	50	315	1220	1610	1015	795	805	435	280	165	105	280	480	700	1495	915	640
28.	120	50	350	1240	1610	1000	790	795	425	270	160	115	290	490	710	1400	900	630

TABLE VIII.—Table exhibiting the eleven-yearly period of Solar spot activity, equalized for shorter periods.

1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.
625	630	620	430	270	135	35	80	465	1115	1440	1325	1180	1000	765	710	370	55	375
620	640	610	425	265	135	35	90	485	1150	1425	1330	1170	955	780	695	355	50	400
610	645	600	415	255	130	30	100	505	1175	1410	1335	1160	920	800	680	350	59	420
600	650	590	405	250	125	25	105	535	1200	1400	1340	1160	890	815	660	340	50	445
595	655	580	400	245	120	25	115	555	1250	1390	1345	1160	855	835	640	315	55	475
590	660	575	395	235	115	25	125	580	1275	1380	1350	1160	825	855	630	295	55	500
580	660	565	390	230	110	20	135	600	1305	1370	1350	1165	795	870	615	280	60	525
575	665	555	380	225	100	20	145	630	1340	1355	1350	1175	770	870	600	265	65	
570	670	550	370	220	95	25	155	660	1360	1350	1350	1185	745	870	590	250	75	
565	675	540	365	215	90	25	165	695	1400	1345	1350	1190	725	865	570	230	90	
565	680	530	360	205	85	30	180	720	1425	1335	1350	1195	705	865	560	215	105	
560	685	525	355	200	80	30	195	750	1450	1325	1350	1205	685	860	550	200	120	
560	680	515	350	195	75	30	205	775	1475	1320	1350	1205	670	850	540	180	145	
555	675	505	345	190	70	35	225	800	1500	1320	1345	1205	655	845	520	165	160	
555	670	500	335	180	65	40	250	830	1505	1315	1335	1205	655	835	505	150	175	
555	665	495	325	175	60	40	270	850	1510	1305	1325	1195	655	820	495	140	200	
560	660	485	315	165	55	45	285	885	1510	1300	1310	1180	650	805	475	125	210	
565	655	475	310	160	50	50	305	905	1505	1300	1290	1175	650	800	465	105	225	
575	655	465	305	155	50	55	330	945	1505	1300	1275	1170	655	790	455	95	255	
585	655	460	300	150	50	60	350	975	1500	1300	1255	1155	670	775	445	85	275	
595	650	455	290	150	45	65	375	1000	1490	1305	1230	1135	680	765	425	75	300	
605	640	450	285	145	45	70	400	1030	1480	1305	1215	1110	700	750	415	65	320	
615	635	445	280	140	40	70	420	1055	1475	1310	1200	1080	720	740	400	60	340	
620	630	440	275	140	40	75	445	1090	1455	1320	1190	1040	745	725	375	55	355	

TABLE II. (continued).—Showing the areas of all Sun-spots observed at the Kew Observatory from January 1, 1864 to December 31, 1866.

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
Jan. 24.	526	0·974	189	.....	189			
	525	0·869	503	230	733			
	524	0·156	17	4	21			
	523	0·078	145	21	167			
	521	0·562	208	61	370			
	520	0·687	123	23	146			
	519	0·713	108	36	145			
	522	0·693	65	30	95	1458	405	1866
26.	526	0·677	35	17	52			
	525	0·531	888	301	1190			
	523	0·500	118	25	142			
	521	0·885	408	136	545			
	519	0·963	170	31	201			
	520	0·948	192	96	288	1811	606	2418
28.	526	0·286	446	89	535			
	525	0·167	649	194	843			
	523	0·833	129	30	159	1224	313	1537
30.	527	0·594	120	26	147			
	526	0·250	51	8	60			
	525	0·443	558	122	681			
	523	0·974	.....	132	132	729	288	1020
Feb. 4.	529	0·635	75	16	92			
	528	0·479	228	57	286			
	527	0·573	83	.....	83	386	73	461
5.	529	0·401	190	41	233			
	528	0·271	424	66	491			
	527	0·739	120	12	133	734	119	857
6.	530	0·521	108	19	128			
	529	0·255	316	44	360			
	528	0·156	391	103	495			
	527	0·833	76	22	98	891	188	1081
10.	530	0·437	198	61	260			
	529	0·740	362	63	426			
	528	0·864	374	102	477	934	226	1163
17.	534	0·635	59	10	75			
	533	0·040	67	12	80			
	532	0·390	59	4	64			
	531	0·495	147	44	191	332	70	410
Mar. 2.	540	0·869	289	93	382			
	539	0·791	110	20	131			
	538	0·375	55	13	69			
	537	0·312	134	52	187			
	536	0·729	355	93	443			
	535	0·875	263	52	315	1206	323	1527
4.	540	0·573	286	78	364			
	539	0·438	65	9	75			
	538	0·192	56	13	69			
	537	0·568	197	78	275			
	536	0·954	392	131	524	996	309	1307
10.	543	0·938	136	37	173			
	542	0·563	132	35	169			
	541	0·599	336	37	373			

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius = 1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864. Mar. 10.	540	0.815	266	88	356	870	197	1071
11.	543	0.863	110	25	136			
	542	0.384	92	27	119			
	541	0.526	411	90	502			
	540	0.920	327	109	436	940	251	1193
12.	543	0.668	91	28	119			
	542	0.168	154	21	177			
	541	0.394	671	138	810			
	540	0.984	490	122	612	1406	309	1718
16.	544	0.984	441	73	514			
	543	0.210	87	21	108			
	542	0.736	137	25	161			
	541	0.768	523	66	589	1188	185	1372
17.	546	0.973	264	37	302			
	545	0.947	221	39	261			
	544	0.852	200	32	232			
	543	0.447	95	19	114	1336	223	1555
	542	0.894	130	28	158			
	541	0.899	426	58	486			
18.	546	0.904	170	50	221			
	545	0.847	136	56	192	1463	244	1709
	544	0.752	201	45	247			
	543	0.605	101	21	122			
	541	0.973	662	37	699			
	542	0.968	193	35	228	516	133	650
19.	546	0.799	176	33	212			
	545	0.694	94	29	123			
	544	0.584	173	42	215			
	543	0.778	73	27	100	541	149	693
23.	548	0.762	211	66	278			
	547	0.589	136	31	168			
	546	0.247	73	17	91			
	545	0.168	17	...	17	503	136	641
	544	0.247	104	35	139			
29.	550	0.884	171	36	208			
	549	0.342	99	36	135			
	548	0.641	171	44	216	608	164	774
	547	0.789	62	20	82			
30.	550	0.736	74	31	105			
	549	0.368	128	46	174			
	548	0.826	311	76	388	460	113	574
	547	0.931	95	11	107			
31.	550	0.647	149	33	182			
	549	0.431	70	...	70			
April 1.	548	0.899	241	80	322	481	90	574
	550	0.468	120	24	144			
	549	0.631	97	10	109			
	548	0.973	264	56	321			
2.	550	0.326	108	27	135	164	48	212
	549	0.799	56	21	77			
8.	554	0.979	348	61	410			
	553	0.394	295	49	347			
	552	0.868	494	76	570	1288	242	1524
	551	0.973	151	56	197			
9.	554	0.894	158	56	215			
	553	0.147	227	60	288			

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
April 9.	552	0.973	226	113	340	611	229	843
11.	554	0.647	127	44	171			
	553	0.289	191	57	249	318	101	420
12.	554	0.684	92	23	116			
	553	0.515	188	49	237	280	72	353
13.	554	0.396	59	13	73			
	553	0.159	124	34	159	183	47	233
14.	554	0.370	64	18	82			
	553	0.344	112	18	130	176	36	212
15.	554	0.460	61	14	75			
	553	0.952	219	29	247			
	555	0.634	27	21	49			
	556	0.989	...	91	91	307	155	462
18.	554	0.989	183	91	275			
	556 _a	0.820	96	29	126	279	120	401
19.	556	0.661	61	33	95	61	33	95
20.	556	0.492	68	24	93	68	24	93
21.	556	0.238	60	8	69	60	8	69
22.	556	0.021	46	12	59	46	12	59
23.	556	0.196	13	8	21	13	8	21
25.	556	0.635	21	5	27	21	5	27
26.	} No spots.							
29.								
May 3.	557	0.346	58	9	67			
	558	0.985	73	24	98	131	33	165
5.	557	0.772	80	27	107			
	559	0.772	40	27	67			
	558	0.495	98	14	112	218	68	286
6.	559	0.638	50	...	50			
	558	0.309	70	8	79			
	557	0.872	43	8	52	163	16	181
7.	560	0.888	215	46	262			
	558	0.187	130	21	151			
	557	0.938	61	15	77	406	82	490
10.	560	0.442	33	9	42			
	558	0.756	71	13	84	104	22	126
12.	560	0.356	22	9	31			
	561	0.872	148	70	218	170	79	249
13.	560	0.495	9	4	14			
	561	0.729	425	118	543	434	122	557
14.	561	0.548	603	106	711			
	560	0.665	102	17	119	705	123	830
15.	562	0.979	123	82	205			
	561	0.346	764	208	973			
	560	0.798	141	28	169	1028	318	1347
16.	562	0.453	70	14	85			
	561	0.176	804	150	956			
	560	0.931	118	71	189	992	235	1230
17.	562	0.293	111	66	178			
	561	0.203	832	174	1006			
	560	0.990	...	122	122	943	362	1306
18.	562	0.266	320	88	409			
	561	0.383	588	151	740	908	239	1149
19.	563	0.979	185	82	266			
	562	0.426	263	98	361			
	561	0.585	558	110	668	1006	290	1295

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
May 20.	563	0.878	87	35	122			
	564	0.426	18	18	37			
	562	0.638	349	82	433			
	561	0.756	630	130	760	1084	265	1352
24.	564	0.920	316	43	359	316	43	359
27.	566	0.969	176	35	211			
	565	0.479	131	24	155	307	59	366
28.	566	0.888	139	28	168			
	565	0.642	111	77	188	250	105	356
30.	570	0.979	123	...	123			
	569	0.941	223	74	298			
	568	0.969	1390	457	1849			
	566	0.601	95	37	132			
	567	0.883	81	27	108	1912	595	2510
June 4.	571	0.638	105	33	138			
	568	0.282	894	332	1227			
	570	0.351	145	31	177			
	569	0.245	188	35	223			
	566	0.638	99	33	133	1431	464	1898
7.	572	0.638	311	55	366			
	571	0.256	237	22	259			
	568	0.506	993	196	1189			
	570	0.346	31	...	31			
	569	0.649	144	16	161			
	566	0.958	159	14	174	1875	303	2180
8.	572	0.453	200	23	224			
	571	0.372	216	18	234			
	568	0.692	833	236	1070			
	569	0.809	130	29	159	1379	306	1687
10.	573	0.957	14	43	58			
	572	0.294	178	40	218			
	571	0.952	116	...	116			
	568	0.936	547	320	867			
	569	0.979	61	...	61	915	403	1320
11.	573	0.888	111	46	158			
	572	0.420	141	37	178			
	568	0.990	275	306	581	527	389	917
13.	573	0.134	107	47	154			
	574	0.484	189	52	243			
	572	0.780	135	40	175	431	139	572
14.	574	0.296	106	17	124			
	573	0.291	66	31	97			
	572	0.888	149	37	187	321	85	408
15.	575	0.979	...	205	205			
	573	0.511	78	19	99			
	574	0.269	190	96	287			
	572	0.984	...	245	245	268	565	836
16.	575	0.915	324	157	482			
	574	0.672	91	34	126			
	573	0.619	384	119	503	799	310	1111
17.	575	0.807	493	231	725			
	574	0.753	117	19	135			
	573	0.312	228	89	317	838	339	1177
18.	575	0.672	406	136	543			
	573	0.915	303	94	397	709	230	940
20.	575	0.307	416	106	523	416	106	523

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
June 21.	575	0.215	405	82	487	405	82	487
23.	575	0.457	449	114	563	449	114	563
24.	575	0.645	416	111	527	416	111	527
30.	578	0.990	367	91	459			
	577	0.796	42	28	70			
	576	0.247	39	17	56			
	575	0.937	23	11	35	471	147	620
July 1.	577	0.457	85	19	104	85	19	104
2.	578	0.942	148	37	186			
	577	0.645	133	27	161			
	576	0.134	21	38	60	302	102	407
4.	579	0.990	244	91	336			
	578	0.688	92	29	123			
	577	0.242	43	8	51			
	576	0.457	19	9	28	398	137	538
5.	579	0.899	417	126	544			
	578	0.538	111	20	131			
	577	0.150	68	8	77	596	154	752
6.	579	0.753	494	104	598			
	578	0.371	110	32	142			
	577	0.296	35	4	40			
	576	0.845	32	16	48	671	156	828
7.	579	0.619	382	97	470			
	578	0.296	75	26	102			
	576	0.937	83	59	141	540	182	713
9.	582	0.990	826	826	1653			
	581	0.420	296	103	398			
	579	0.258	211	57	268			
	578	0.532	65	20	85	1398	1006	2404
11.	582	0.829	1226	212	1439			
	581	0.145	270	34	305			
	579	0.269	225	70	295			
	578	0.834	60	15	76	1781	331	2115
13.	582	0.430	1071	206	1278			
	581	0.468	24	14	38			
	579	0.667	401	79	480	1496	299	1796
14.	583	0.215	487	117	605			
	582	0.350	556	117	674			
	581	0.645	16	5	22			
	579	0.807	609	130	739	1668	369	2040
15.	583	0.172	566	167	736			
	582	0.183	633	134	767			
	579	0.937	498	177	677	1697	478	2180
16.	583	0.296	566	129	695			
	582	0.118	377	89	467			
	579	0.990	979	244	1224	1922	462	2386
19.	583	0.850	353	96	450			
	582	0.775	276	67	344	629	163	794
20.	583	0.937	320	107	427			
	582	0.888	224	56	281	544	163	708
21.	583	0.990	336	...	336			
	582	0.979	328	61	389			
	584	0.942	49	12	62	713	73	787
23.	585	0.405	23	18	41			
	584	0.677	23	11	34	46	29	75
25.	No spot.							

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius = 1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
July 26.	585	0.366	45	18	63			
	584	0.350	72	13	85	117	31	148
27.	585	0.581	93	36	130			
	584	0.446	135	18	151	228	54	281
29.	585	0.877	95	26	122			
	584	0.715	55	12	67	150	38	189
Aug. 1.	586	0.334	81	22	103			
	587	0.915	282	94	376	363	116	479
2.	586	0.366	41	9	49			
	587	0.785	241	41	282	282	50	331
4.	587	0.452	152	28	181			
	588	0.715	164	36	201	316	64	382
5.	589	0.979	143	41	184			
	587	0.269	88	17	105			
	588	0.829	98	15	114	329	73	403
6.	590	0.979	352	123	475			
	589	0.888	75	37	111			
	587	0.038	76	21	97			
	588	0.936	83	...	83	586	181	766
8.	590	0.781	697	135	832			
	591	0.856	115	41	156			
	589	0.615	183	64	248			
	592	0.471	81	19	100			
	587	0.455	70	14	85	1146	273	1421
10.	590	0.411	661	130	791			
	591	0.588	378	120	500			
	589	0.321	427	157	586			
	593	0.203	34	13	47			
	592	0.776	365	135	500			
	589	0.802	35	21	56	1900	576	2480
11.	590	0.203	675	117	792			
	591	0.428	488	98	587			
	589	0.288	704	129	833			
	592	0.883	408	90	499			
	593	0.411	23	...	23	2298	434	2734
12.	590	0.107	440	175	616			
	591	0.294	677	191	869			
	589	0.428	1076	235	1311			
	592	0.974	378	151	529	2571	752	3325
13.	590	0.294	632	96	729			
	591	0.358	1226	195	1422			
	589	0.588	1406	332	1739			
	593	0.856	33	8	41	3297	631	3931
15.	590	0.652	541	113	654			
	591	0.642	594	122	717			
	589	0.856	1041	189	1231			
	593	0.893	56	9	65	2232	433	2667
19.	595	0.107	71	17	89	71	17	89
20.	595	0.374	133	9	142	133	9	142
21.	} No spots.							
25.								
26.								
30.								
	597	0.776	114	54	168			
	596	0.139	94	51	146	208	105	314
Sept. 1.	597	0.471	139	28	168			
	596	0.513	99	34	133	238	62	301

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius = 1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
Sept. 3.	599	0.925	227	68	295			
	597	0.385	119	27	147			
	596	0.829	68	23	93	414	118	535
5.	599	0.638	199	44	244			
	597	0.659	89	33	121	288	77	365
15.	601	0.386	115	23	138			
	600	0.978	205	102	307	320	125	445
17.	602	0.920	152	21	174			
	601	0.159	25	0	25	177	21	199
19.	602	0.439	42	14	56			
	601	0.460	14	19	33	56	33	89
21.	602	0.064	25	8	34	25	8	34
22.	602	0.281	13	...	13	13	0	13
23.	No spot							
24.	604	0.963	61	30	90	61	30	90
27.	604	0.558	15	10	25			
	603	0.316	31	26	57	46	36	82
28.	603	0.529	35	10	45	35	10	45
29.	605	0.968	49	49	98			
	603	0.631	10	...	10	59	49	108
30.	605	0.868	51	25	76	51	25	76
Oct. 1.	606	0.968	148	49	196			
	605	0.721	24	24	49	172	73	245
3.	606	0.762	105	46	151			
	605	0.378	23	9	32	128	55	183
4.	606	0.579	124	20	145			
	605	0.147	43	8	51	167	28	196
5.	606	0.394	92	23	115			
	605	0.378	46	36	82	138	59	197
6.	606	0.242	104	17	122			
	605	0.536	40	25	65	144	42	187
7.	606	0.295	57	17	75			
	605	0.757	6	19	26	63	36	101
8.	607	0.684	23	11	34			
	606	0.405	97	23	120			
	605	0.762	...	6	6	120	40	160
10.	607	0.247	4	8	13			
	606	0.762	92	19	112	96	27	125
12.	606	0.875	95	26	122	95	26	122
15.	609	0.365	118	54	172	118	54	172
18.	609	0.902	19	9	29	19	9	29
19.	610	0.771	19	13	33	19	13	33
21.	610	0.625	92	43	136	92	43	136
22.	613	0.849	24	8	32			
	612	0.912	135	52	188			
	611	0.849	224	56	281			
	610	0.286	84	44	129	467	160	630
24.	613	0.495	83	9	93			
	612	0.641	99	27	127			
	611	0.516	133	44	178			
	610	0.635	5	32	38	320	112	436
28.	614	0.843	101	39	140			
	612	0.391	203	55	258			
	611	0.505	137	44	181	441	138	579
31.	616	0.985	73	49	122			
	615	0.964	277	77	355			

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1864.								
Oct. 31.	614	0.312	290	89	380			
	612	0.886	99	18	117	739	233	974
Nov. 4.	616	0.989	1143	190	1334			
	615	0.589	521	99	621			
	614	0.443	122	28	151	1786	317	2106
14.	618	0.964	16	16	32			
	617	0.208	17	13	30			
	616	0.985	.....	196	196	33	225	255
18.	620	0.713	18	12	30			
	619	0.281	48	8	57			
	618	0.208	164	26	191	230	46	278
22.	620	0.291	22	13	35			
	621	0.381	124	36	161			
	619	0.755	39	6	45			
	618	0.812	137	50	188	322	105	429
25.	624	0.849	273	120	393			
	623	0.771	284	79	364			
	622	0.511	368	118	486			
	621	0.812	181	50	231	1106	367	1473
29.	626	0.938	37	...	37			
	625	0.922	196	65	261			
	624	0.182	393	64	458			
	623	0.218	178	56	235			
	622	0.495	1023	230	1254	1827	415	2245
Dec. 1.	626	0.713	6	12	18			
	625	0.682	121	30	150			
	624	0.427	361	61	423			
	623	0.521	188	53	243			
	622	0.823	743	162	905	1419	318	1739
2.	626	0.469	14	4	19			
	625	0.485	106	34	140			
	624	0.615	210	81	291			
	623	0.703	204	42	247			
	622	0.938	809	148	959	1343	309	1656
5.	627	0.755	13	6	19			
	625	0.270	101	35	135			
	624	0.985	612	343	956			
	623	0.995	366	163	529	1092	547	1639
9.	628	0.912	94	31	124	94	31	124
19.	629	0.835	852	210	1062	852	210	1062
20.	631	0.990	.....	703	703			
1865.	629	0.954	1061	207	1268	1061	910	1971
Jan. 4.	633	0.511	118	44	163			
	632	0.886	27	9	36	145	53	199
7.	634	0.407	59	9	69			
	633	0.745	75	12	88	134	21	157
9.	635	0.739	19	6	25			
	634	0.729	56	18	74			
	633	0.417	4	14	18	79	38	117
13.	636	0.609	101	42	143			
	635	0.286	240	84	325	341	126	468
23.	643	0.954	124	41	164			
	641	0.615	59	27	86			
	640	0.172	68	43	111			
	642	0.703	150	102	253			
	639	0.140	81	43	124			

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1865.								
Jan. 23.	638	0.260	145	92	237			
	637	0.843	1055	296	1352	1682	644	2327
Feb. 3.	646	0.391	32	4	37			
	645	0.469	453	110	564			
	644	0.120	102	25	128			
	643	0.713	36	6	42			
	641	0.990	244	214	459	867	359	1230
9.	649	0.239	298	73	372			
	645	0.348	18	13	31			
	647	0.276	66	17	83			
	644	0.912	261	145	408	643	248	894
15.	649	0.391	203	64	268			
	647	0.417	75	28	103	278	92	371
17.	649	0.859	156	82	239			
	647	0.912	62	10	73	218	92	312
25.	650	0.920	34	79	113			
	651	0.252	26	.....	26	60	79	139
28.	651	0.826	38	15	53			
	652	0.568	317	83	400			
	653	0.973	56	18	75	411	116	528
Mar. 1.	653	0.868	85	25	110			
	652	0.726	237	87	324			
	651	0.947	.....	13	13	322	125	447
3.	653	0.595	294	47	342			
	652	0.957	87	72	159	381	119	501
7.	653	0.499	220	98	319	220	98	319
8.	654	0.389	18	4	23			
	653	0.631	229	54	284	247	58	307
9.	654	0.499	39	9	49			
	653	0.778	209	40	250	248	49	299
13.	655	0.236	95	21	117			
	657	0.195	51	26	77			
	656	0.332	22	13	36	168	60	230
17.	656	0.931	225	.....	225			
	655	0.736	199	62	262	424	62	487
20.	656	0.894	102	46	149	102	46	149
21.	656	0.968	32	65	98	32	65	98
22.	660	0.778	20	27	47			
	659	0.705	241	120	361			
	658	0.384	124	87	212			
	661	0.563	41	.....	41	426	234	661
23.	662	0.894	75	.....	75	75	.....	75
24.	662	0.842	7	23	31	7	23	31
27.	663	0.789	553	227	781	553	227	781
28.	663	0.657	615	169	784	615	169	784
30.	663	0.378	473	170	644	473	170	644
31.	663	0.342	498	203	701	498	203	701
April 1.	663	0.431	408	108	517	408	108	517
3.	663	0.730	275	62	337	275	62	337
4.	663	0.893	243	93	337	243	93	337
6.	663	0.990	244	91	336	244	91	336
8.	664	0.476	72	28	100	72	28	100
10.	665	0.973	18	56	75			
	664	0.831	76	22	98	94	78	173
11.	665	0.873	26	17	43			
	664	0.936	23	35	59	49	52	102

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1865.								
Apr. 12.	665	0.730	6	12	18	6	12	18
13.	665	0.651	.....	11	11			
	666	0.915	.....	20	20	.....	31	31
20.	667	0.577	109	36	145			
	668	0.265	70	35	105	179	71	250
21.	667	0.714	245	49	294			
	668	0.265	114	.....	114			
	669	0.895	46	9	56	405	58	464
24.	670	0.688	5	17	23			
	668	0.529	25	.....	25			
	667	0.990	91	30	121	121	47	169
25.	670	0.559	41	20	61	41	20	61
26.	670	0.372	46	4	50	46	4	50
27.	670	0.266	39	8	48			
	671	0.181	34	8	43	73	16	91
May 2.	673	0.622	43	16	59			
	672	0.670	91	40	131			
	674	0.559	.....	5	5			
	671	0.814	.....	7	7	134	68	202
3.	673	0.442	127	42	170			
	672	0.665	57	11	68	184	53	238
5.	676	0.990	91	.....	91			
	675	0.883	81	27	108			
	673	0.287	93	13	106			
	672	0.234	8	.....	8	273	40	313
6.	676	0.851	32	32	64			
	675	0.735	131	43	175			
	673	0.426	51	9	61			
	672	0.521	18	.....	18	232	84	318
8.	676	0.469	14	4	19			
	675	0.266	39	.....	39	53	4	58
9.	677	0.719	55	6	61			
	676	0.261	26	.....	26			
	675	0.181	25	12	38	106	18	125
12.	678	0.453	95	56	152			
	679	0.293	26	.....	26	121	56	178
13.	678	0.654	202	56	259			
	679	0.426	23	4	28	225	60	287
18.	680	0.835	312	54	366	312	54	366
19.	680	0.947	431	52	483			
	681	0.638	71	16	88	502	68	571
22.	681	0.985	612	147	760	612	147	760
23.	No spots.							
24.								
25.	682	0.990	183	428	612			
	683	0.990	61	91	153	244	519	765
26.	682	0.931	534	83	617			
	683	0.941	161	62	223	695	145	840
27.	682	0.825	364	60	426			
	683	0.830	145	30	174	509	90	600
29.	682	0.495	363	112	476			
	683	0.479	62	29	91	425	141	567
30.	682	0.307	308	66	375			
	683	0.301	93	8	102	401	74	477
31.	682	0.984	98	49	147			
	683	0.161	60	12	73			

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius = 1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1865.								
May 31.	682	0.177	458	77	536	616	138	756
June 5.	685	0.958	29	.....	29			
	684	0.123	30	17	46			
	682	0.915	271	73	345	330	90	420
6.	686	0.985	.....	710	710			
	682	0.985	392	49	441	392	759	1151
7.	686	0.453	309	90	401			
	687	0.899	106	38	145	415	128	546
8.	686	0.780	636	135	771			
	687	0.645	16	5	22	652	140	793
9.	686	0.592	626	131	758			
	687	0.807	29	.....	29	655	131	787
12.	686	0.160	431	129	560			
	687	0.107	4	8	12	435	137	572
13.	686	0.321	400	81	482	400	81	482
14.	686	0.588	252	88	342	252	88	342
16.	No spot.							
23.	689	0.963	16	49	65	16	49	65
July 3.	No spot.							
4.	690	0.990	.....	91	91	.....	91	91
5.	690	0.942	24	24	49	24	24	49
7.	690	0.661	33	16	50			
	691	0.516	19	4	24	52	20	74
10.	690	0.092	21	8	29			
	691	0.081	21	.....	21			
	692	0.780	107	40	148	149	48	198
11.	690	0.269	13	8	22			
	691	0.280	17	.....	17			
	692	0.603	132	26	160	162	34	199
12.	690	0.495	14	4	19			
	691	0.645	16	5	22			
	692	0.393	115	18	133	145	27	174
14.	690	0.968	16	16	32			
	692	0.172	103	21	124	119	37	156
15.	692	0.350	94	18	112	94	18	112
20.	693	0.350	194	40	235	194	40	235
27.	694	0.231	43	8	51	43	8	51
28.	694	0.102	46	16	63	46	16	63
29.	694	0.215	17	8	26			
	695	0.242	21	17	39			
	696	0.296	31	4	35	69	29	100
Aug. 3.	698	0.850	16	8	24			
	697	0.813	754	275	1029			
	695	0.792	48	13	62			
	696	0.834	60	.....	60	878	296	1175
7.	700	0.990	214	122	336			
	699	0.615	5	16	21			
	698	0.134	47	4	51	266	142	408
9.	700	0.856	115	57	173			
	699	0.267	18	9	26			
	698	0.331	14	9	23	147	75	222
10.	700	0.695	153	53	206			
	699	0.802	7	7	14			
	698	0.946	26	13	39	186	73	259
12.	700	0.342	126	27	153	126	27	153
14.	700	0.213	26	8	34	26	8	34

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1865.								
Aug. 16.	701	0.277	17	8	26	17	8	26
17.	702	0.936	47	.....	47			
	701	0.661	33	16	50	80	16	97
18.	702	0.794	.....	7	7			
	701	0.508	9	9	19	9	16	26
21.	703	0.873	535	95	632	535	95	632
22.	703	0.767	497	72	569	497	72	569
24.	703	0.407	466	97	563	466	97	563
26.	703	0.555	467	97	565	467	97	565
29.	703	0.699	224	41	265			
	704	0.603	85	32	116	309	73	381
30.	704	0.423	169	42	211			
	703	0.847	88	32	120	257	74	331
Sept. 1.	704	0.026	315	59	374			
	703	0.984	98	.....	98	413	59	472
2.	704	0.265	303	57	360	303	57	360
4.	704	0.661	367	124	491	367	124	491
5.	704	0.831	525	83	609	525	83	609
6.	704	0.925	467	79	547	467	79	547
7.	704	0.990	428	122	550	428	122	550
8.	} No spots.							
9.								
13.	705	0.952	124	.....	124	124	.....	124
14.	705	0.873	35	.....	35	35	.....	35
15.	705	0.725	49	42	91	49	42	91
16.	705	0.579	83	36	119	83	36	119
18.	705	0.684	46	17	63			
	706	0.284	35	17	52	81	34	115
19.	705	0.752	32	6	39			
	706	0.826	68	22	91	100	28	130
20.	705	0.894	28	9	37			
	706	0.920	141	32	174	169	41	211
22.	707	0.984	1398	269	1668	1398	269	1668
23.	707	0.926	1444	479	1924	1444	479	1924
25.	707	0.611	881	178	1059	881	178	1059
26.	707	0.421	709	141	850	709	141	850
27.	707	0.184	503	134	637	503	134	637
28.	707	0.037	400	123	523	400	123	523
30.	707	0.458	353	114	468			
	711	0.405	46	9	55	399	123	523
Oct. 2.	707	0.815	423	111	534			
	712	0.874	61	26	87	484	137	621
3.	707	0.936	379	71	451			
	712	0.894	37	28	65	416	99	516
4.	707	0.990	336	214	550			
	712	0.736	62	25	87	398	239	637
5.	712	0.568	52	10	62	52	10	62
6.	712	0.384	41	13	55	41	13	55
7.	712	0.158	34	12	47			
	713	0.990	367	.....	367	401	12	414
10.	713	0.729	993	275	1268	993	275	1268
11.	713	0.563	1074	354	1428	1074	354	1428
12.	713	0.412	1122	246	1369			
	714	0.833	83	30	114	1205	276	1483
13.	713	0.328	1118	288	1407			
	714	0.677	23	5	29	1141	293	1436

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1865.								
Oct. 17.	713	0.833	1104	273	1378			
	714	0.296	8	17	26	1112	290	1404
20.	713	0.985	.....	98	98	.....	98	98
24.	} No spots.							
27.								
28.								
Nov. 2.								
3.	715	0.990	.....	33	33	.....	33	33
4.	715	0.928	261	102	363	261	102	363
6.	715	0.317	147	44	192			
	716	0.370	13	4	18	160	48	210
13.	715	0.812	217	50	267			
	717	0.490	4	.....	4			
	718	0.954	275	27	302	496	77	573
15.	715	0.990	336	91	428			
	718	0.703	228	42	271	564	133	699
22.	719	0.974	452	.....	452	452	.....	452
23.	719	0.869	391	93	485	391	93	485
24.	719	0.719	593	79	674	593	79	674
Dec. 2.	719	0.922	337	76	414			
	720	0.286	168	48	218			
	721	0.859	90	33	123	595	157	755
13.	} No spots.							
14.								
19.								
20.								
	722	0.781	230	195	426			
	723	0.948	39	13	52	269	208	478
30.	724	0.729	668	74	743	668	74	743
1866.								
Jan. 1.	724	0.365	395	63	460			
	725	0.338	230	58	289	625	121	749
3.	724	0.270	252	44	296			
	725	0.156	206	17	223			
	726	0.985	171	73	245	629	134	764
4.	724	0.453	128	23	152			
	725	0.391	138	41	179			
	726	0.896	77	29	106	343	93	437
7.	724	0.912	292	166	460			
	725	0.912	52	10	62			
	726	0.391	.....	13	13	344	189	535
8.	724	0.990	734	122	856			
	725	0.985	73	.....	73			
	726	0.391	9	.....	9			
	727	0.990	826	275	1101	1642	397	2039
9.	727	0.938	747	173	921	747	173	921
15.	727	0.328	698	144	842			
	728	0.959	407	174	582	1105	318	1424
19.	727	0.959	553	131	683			
	728	0.276	278	70	348			
	729	0.469	236	24	260	1067	225	1291
23.	728	0.641	366	82	449			
	729	0.438	18	9	28	384	91	477
24.	728	0.781	257	121	378	257	121	378
29.	731	0.750	324	85	410			
	730	0.505	58	9	68			
	729	0.729	18	.....	18	400	94	496

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1866.								
Feb. 5.	731	0.609	197	48	245			
	732	0.938	447	161	610	644	209	855
6.	732	0.817	408	74	482			
	731	0.781	189	67	256	597	141	738
8.	732	0.495	329	78	407			
	731	0.985	294	73	367	623	151	774
13.	735	0.917	690	303	995			
	734	0.693	171	35	206			
	732	0.693	265	76	342	1126	414	1543
18.	735	0.260	1428	330	1758			
	734	0.521	138	24	163	1566	354	1921
19.	735	0.365	1559	405	1964			
	734	0.703	114	24	138	1673	429	2102
20.	735	0.573	1466	478	1944			
	734	0.859	139	66	206	1605	544	2150
21.	735	0.703	1567	536	2104			
	734	0.938	.....	161	161	1567	697	2265
23.	735	0.954	1186	330	1516	1186	330	1516
24.	735	0.990	795	275	1071	795	275	1071
26.	736	0.631	54	21	75	54	21	75
Mar. 2.	737	0.752	71	32	104	71	32	104
6.	738	0.684	208	40	250	208	40	250
7.	738	0.552	192	55	247	192	55	247
8.	738	0.384	194	37	231	194	37	231
9.	738	0.263	145	30	176	145	30	176
12.	738	0.647	177	38	216			
	739	0.894	281	102	384	458	140	600
14.	739	0.641	127	38	166			
	738	0.920	141	65	207	268	103	373
22.	740	0.794	247	42	290			
	739	0.555	71	30	102	318	72	392
23.	740	0.608	53	21	74			
	739	0.714	85	24	110	138	45	184
24.	741	0.540	50	15	65			
	740	0.449	143	70	214			
	739	0.858	98	24	123	291	109	402
27.	741	0.132	98	43	141			
	740	0.476	177	96	274	275	139	413
29.	741	0.847	88	56	144	88	56	144
30.	741	0.925	44	22	68	44	22	68
Apr. 3.	742	0.624	119	32	152	119	32	152
5.	742	0.307	57	31	89	57	31	89
6.	743	0.677	29	11	40			
	742	0.265	35	4	39	64	15	79
12.	745	0.925	316	44	363			
	744	0.465	62	19	81	378	63	444
14.	745	0.692	182	64	247			
	744	0.026	4	.....	4	186	64	251
16.	745	0.372	174	41	225	174	41	225
18.	745	0.415	106	32	139	106	32	139
19.	745	0.585	110	31	141	110	31	141
20.	745	0.719	103	18	122	103	18	122
21.	745	0.856	49	16	66	49	16	66
23.	746	0.729	112	56	168	112	56	168
24.	746	0.559	235	56	292	235	56	292
25.	746	0.319	238	45	283	238	45	283

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra,	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1866.								
Apr. 26.	746	0.160	129	25	154	129	25	154
27.	746	0.240	82	47	131	82	47	131
30.	746	0.931	83	.....	83	83	.....	83
May 2.	} No spots.							
3.								
4.								
5.								
7.								
8.	748	0.495	37	23	61	37	23	61
9.	748	0.251	105	22	127			
	749	0.535	50	25	75	155	47	202
10.	748	0.134	17	8	25			
	749	0.337	63	49	112	80	57	137
11.	749	0.267	206	52	259	206	52	259
12.	749	0.187	364	90	456	364	90	456
15.	749	0.877	289	122	412	289	122	412
16.	749	0.963	355	92	448	355	92	448
17.	749	0.974	170	18	189			
	750	0.925	102	34	135	272	52	324
18.	750	0.802	133	35	169	133	35	169
19.	750	0.631	32	21	54	32	21	54
21.	751	0.888	149	37	187			
	750	0.267	44	.....	44	193	37	231
22.	751	0.769	125	33	158	125	33	158
23.	751	0.581	130	31	161	130	31	161
25.	751	0.285	129	26	155	129	26	155
26.	751	0.107	46	12	59	46	12	59
28.	751	0.565	102	30	132	102	30	132
29.	751	0.726	112	25	137	112	25	137
30.	751	0.872	87	43	130	87	43	130
June 1.	752	0.979	594	143	738	594	143	738
2.	752	0.861	396	98	496	396	98	496
6.	752	0.107	226	59	285	226	59	285
23.	755	0.888	233	56	290	233	56	290
26.	755	0.963	293	184	478	293	184	478
27.	755	0.990	.....	244	244	.....	244	244
28.	756	0.764	39	19	59			
	757	0.968	98	49	148	137	68	207
30.	756	0.377	92	27	119			
	757	0.737	162	56	218	254	83	337
July 2.	756	0.134	38	12	51			
	757	0.366	154	22	177	192	34	228
4.	757	0.188	143	13	156	143	13	156
5.	757	0.388	115	13	129	115	13	129
6.	757	0.581	36	20	57	36	20	57
7.	757	0.764	26	19	46	26	19	46
9.	757	0.973	37	18	56	37	18	56
10.	757	0.990	61	.....	61	61	.....	61
12.	758	0.942	124	37	161	124	37	161
13.	758	0.834	159	22	182	159	22	182
16.	758	0.296	120	35	155	120	35	155
18.	758	0.667	102	28	131	102	28	131
20.	758	0.801	133	21	155	133	21	155
21.	} No spots.							
30.								
Aug. 9.	759	0.348	171	45	217	171	45	217
10.	759	0.588	189	31	220	189	31	220

TABLE II. (continued).

Date.	Group.	Mean distance from centre, radius=1.	Area of Penumbra.	Area of Umbra.	Area of whole Spot.	Whole for the day.		
						Penumbra.	Umbra.	Whole Spot.
1866.								
Aug. 11.	759	0.732	137	31	168	137	31	168
16.	760	0.588	163	67	231	163	67	231
17.	760	0.401	130	55	186	130	55	186
18.	760	0.197	151	43	194	151	43	194
20.	760	0.348	85	49	135	85	49	135
30.	761	0.265	308	96	404	308	96	404
31.	761	0.449	353	80	434	353	80	434
Sept. 1.	761	0.635	323	54	377	323	54	377
3.	761	0.925	430	113	534	430	113	534
5.	No spots.							
10.								
11.								
13.								
14.								
15.								
17.								
21.	762	0.810	246	50	297	246	50	297
24.	762	0.265	242	44	286	242	44	286
25.	762	0.132	236	60	296	236	60	296
27.	762	0.264	184	39	224	184	39	224
28.	762	0.635	224	32	257	224	32	257
Oct. 10.	763	0.925	.....	34	34	.....	34	34
13.	No spots.							
15.		0.868	102	34	136	102	34	136
16.		0.710	84	24	108	84	24	108
17.		0.552	25	20	45			
		0.605	48	5	53			
		0.963	139	77	215	212	102	313
19.	764	0.205	60	13	73			
	766	0.684	127	23	150	187	36	223
24.	766	0.353	91	18	109	91	18	109
26.	766	0.736	118	25	143	118	25	143
28.	766	0.973	207	37	245			
	767	0.316	48	26	75	255	63	320
31.	767	0.433	103	9	112	103	9	112
Nov. 2.	767	0.760	6	26	32	6	26	32
4.	No spots.							
6.								
8.								
14.								
17.								
19.	768	0.938	37	74	112	37	74	112
20.	768	0.807	36	50	86			
	769	0.938	112	49	161	148	99	247
21.	768	0.661	45	39	84			
	769	0.797	42	49	91	87	88	175
25.	768	0.202	8	8	17			
	769	0.100	50	21	71			
	770	0.526	55	10	65	113	39	153
26.	769	0.208	91	21	113	91	21	113
27.	769	0.703	18	12	30			
	770	0.469	57	14	72	75	26	102
28.	769	0.641	44	22	66	44	22	66
Dec. 7.	No spots.							
14.								
19.								
28.								

TABLE III. (continued).—Heliographic Elements of Sun-spots observed at Kew Observatory during 1864, 1865, and 1866.

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Heliographical Longitude.	Heliographical Latitude.	Spot.
1864. Jan. 24.	3624	23.494	519	0.723	256 13	103 21	154 33	— 3 19	M.
	3625		519	0.726	255 28	102 17	153 29	— 4 1	n.
	3626		520	0.631	243 10	100 38	151 50	— 7 23	a.
	3627		520	0.642	243 17	101 12	152 24	— 7 26	A.
	3628		520	0.670	244 1	99 17	150 29	— 8 19	B.
	3629		520	0.694	244 58	99 13	150 25	— 8 25	b.
	3630		520	0.693	241 12	98 24	149 36	— 6 59	c.
	3631		521	0.577	253 19	87 37	138 49	— 3 21	P.
	3632		521	0.570	254 47	88 53	140 5	— 3 37	Q.
	3633		521	0.584	251 25	87 14	138 26	— 4 19	r.
	3634		521	0.563	252 33	86 46	137 58	— 4 12	s.
	3635		522	0.692	288 54	89 31	140 43	+20 26	S.
	3636		522	0.683	289 11	92 40	143 52	+20 51	N.
	3637		523	0.101	195 17	49 58	101 10	— 4 2	X.
	3638		523	0.093	194 13	56 13	101 25	— 3 56	x.
	3639		523	0.090	194 11	54 32	102 44	— 4 17	y.
	3640		524	0.155	131 28	41 43	92 55	— 7 26	Z.
	3641		524	0.151	130 44	42 58	94 10	— 7 34	z.
	3642		525	0.828	93 17	343 49	35 1	—13 28	Y ⁰ .
	3643		525	0.833	93 33	344 10	35 22	—13 57	Y ¹ .
	3644		525	0.847	94 51	342 28	33 40	—14 9	Y ² .
	3645		526	0.888	92 19	321 33	12 45	—15 2	W.
	3646		526	0.893	92 33	325 16	16 28	—16 19	w ⁰ .
	3647		526	0.895	94 0	325 43	16 55	—16 36	w ¹ .
	3648		526	0.901	94 11	325 49	17 1	—17 2	F.
	3649	23.510	519	0.724	256 20	103 30	154 40	— 3 24	M.
	3650		519	0.727	255 29	102 20	153 30	— 4 0	n.
	3651		520	0.630	243 26	100 37	151 47	— 7 26	a.
	3652		520	0.644	243 11	101 18	152 28	— 7 28	A.
	3653		520	0.671	244 10	99 24	150 34	— 8 25	B.
	3654		520	0.694	245 2	99 15	150 25	— 8 39	b.
	3655		520	0.696	241 33	98 20	149 30	— 6 49	c.
	3656		521	0.579	253 24	87 31	138 41	— 3 22	P.
	3657		521	0.571	254 46	88 55	140 5	— 3 39	Q.
	3658		521	0.584	251 28	87 3	138 13	— 4 22	r.
	3659		521	0.565	252 36	86 44	137 54	— 4 19	s.
	3660		522	0.693	288 56	89 32	140 42	+20 27	S.
	3661		522	0.684	289 0	92 49	143 59	+20 49	N.
	3662		523	0.102	195 16	49 1	101 11	— 4 10	X.
	3663		523	0.094	194 18	50 16	101 26	— 3 54	x.
	3664		523	0.091	194 5	51 38	102 48	— 4 19	y.
	3665		524	0.154	130 59	41 45	92 55	— 7 22	Z.
	3666		524	0.150	130 46	43 6	94 16	— 7 39	z.
	3667		525	0.826	93 28	344 2	35 12	—13 33	Y ⁰ .
	3668		525	0.830	93 34	344 16	35 26	—13 51	Y ¹ .
	3669		525	0.847	94 57	342 34	33 44	—13 58	Y ² .
	3670		526	0.886	92 21	321 39	12 49	—15 11	W.
	3671		526	0.892	92 33	325 19	16 29	—16 22	w ⁰ .
	3672		526	0.894	94 7	325 45	16 55	—16 38	w ¹ .
	3673		526	0.899	94 16	326 1	17 11	—17 5	F.
26.	3674	25.539	519	0.960	254 25	132 9	154 22	— 3 30	M.
	3675		519	0.964	255 1	131 20	153 33	— 4 12	n.
	3676		520	0.943	248 27	129 29	151 42	— 7 15	a.
	3677		520	0.946	249 33	129 37	151 50	— 7 30	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Jan. 26.	3678	25.239	520	0.953	249 4	128 17	150 30	- 8 22	B.
	3679		520	0.966	250 0	128 16	150 29	- 8 22	b.
	3680		520	0.970	247 52	126 55	149 8	- 6 53	c.
	3681		521	0.859	254 34	116 38	138 51	- 3 22	P.
	3682		521	0.873	251 29	118 59	141 12	- 3 42	Q.
	3683		521	0.890	253 46	117 1	139 14	- 4 22	r.
	3684		521	0.905	254 51	115 20	137 33	- 4 9	s.
	3685		523	0.514	252 48	79 44	101 57	- 4 11	X.
	3686		523	0.517	253 13	79 20	101 33	- 4 0	x.
	3687		525	0.473	94 17	13 5	35 18	-13 22	Y ⁰ .
	3688		525	0.428	94 53	13 27	35 40	-14 0	Y ¹ .
	3689		525	0.439	94 10	11 46	33 59	-13 50	Y ² .
	3690		525	0.495	95 2	9 58	32 11	-12 2	G.
	3691		525	0.542	92 41	8 13	30 26	-13 14	g ¹ .
	3692		525	0.545	92 56	9 34	31 47	-14 4	g ² .
	3693		525	0.588	97 12	9 30	31 43	-13 3	H.
	3694		525	0.590	97 12	8 58	31 11	-13 19	h.
	3695		526	0.654	89 33	350 36	12 49	-16 33	W.
	3696		526	0.659	89 47	354 0	16 13	-15 46	w.
	3697	25.552	519	0.962	254 33	132 29	154 29	- 3 32	M.
	3698		519	0.966	255 6	131 40	153 40	- 4 17	n.
	3699		520	0.944	248 30	129 45	151 45	- 7 10	a.
	3700		520	0.947	250 0	129 45	151 45	- 7 33	A.
	3701		520	0.956	249 11	128 31	150 31	- 8 12	B.
	3702		520	0.967	249 57	128 25	150 25	- 8 20	b.
	3703		520	0.978	247 48	127 18	149 18	- 6 52	c.
	3704		521	0.861	254 30	116 27	138 27	- 3 16	P.
	3705		521	0.875	251 23	119 19	141 19	- 3 42	Q.
	3706		521	0.892	253 49	117 14	139 14	- 4 20	r.
	3707		521	0.906	254 56	115 24	137 46	- 4 18	s.
	3708		523	0.517	252 55	79 49	101 49	- 4 16	X.
	3709		523	0.519	253 27	79 25	101 25	- 3 49	x.
	3710		525	0.472	94 28	13 15	35 15	-13 17	Y ⁰ .
	3711		525	0.426	94 56	13 43	35 43	-14 4	Y ¹ .
	3712		525	0.436	94 2	11 48	33 48	-13 30	Y ² .
	3713		525	0.492	95 17	10 10	32 10	-12 10	G.
	3714		525	0.541	92 44	8 36	30 36	-13 15	g ¹ .
	3715		525	0.540	92 57	9 50	31 50	-14 19	g ² .
	3716		525	0.586	97 13	10 0	32 0	-13 26	H.
	3717		525	0.588	97 1	9 15	31 15	-13 20	h.
	3718		526	0.652	89 36	350 58	12 58	-16 30	W.
	3719		526	0.656	89 42	354 15	16 15	-15 56	w.
28.	3720	27.526	523	0.843	251 17	107 49	101 47	- 4 43	X.
	3721		523	0.847	251 33	107 21	101 19	- 4 2	x.
	3722		525	0.145	172 6	42 14	36 12	-12 55	Y ⁰ .
	3723		525	0.153	165 3	42 1	35 59	-13 43	Y ¹ .
	3724		525	0.159	166 19	39 17	33 15	-12 29	Y ² .
	3725		525	0.162	158 23	39 13	33 11	-12 2	G.
	3726		525	0.188	110 12	37 10	31 8	-13 10	g ¹ .
	3727		525	0.294	118 57	38 49	32 47	-13 55	g ² .
	3728		525	0.238	120 11	37 51	31 49	-12 48	H.
	3729		525	0.293	114 33	38 2	32 0	-13 15	h.
	3730		526	0.299	96 0	19 19	13 17	-15 24	W.
	3731		526	0.314	96 12	23 24	17 22	-15 55	w.
	3732	27.540	523	0.845	252 23	108 7	101 53	- 4 40	X.
	3733		523	0.849	251 47	107 43	101 29	- 3 57	x.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Jan. 28.	3734	27.540	525	0.143	173° 21'	42° 41'	36° 27'	-12° 53'	Y ⁰ .
	3735		525	0.151	166 14	41 58	35 44	-13 30	Y ¹ .
	3736		525	0.157	167 35	39 16	33 2	-12 14	Y ² .
	3737		525	0.161	158 29	39 23	33 9	-12 21	G.
	3738		525	0.186	111 9	37 54	31 40	-13 8	g ¹ .
	3739		525	0.294	119 13	38 49	32 35	-13 44	g ² .
	3740		525	0.238	120 17	37 42	31 28	-12 41	H.
	3741		525	0.290	114 38	38 10	31 56	-13 11	h.
	3742		526	0.298	96 42	19 26	13 12	-15 15	W.
	3743		526	0.312	96 31	23 54	17 40	-15 57	w.
30.	3744	29.622	523	0.987	247 40	137 48	102 2	- 4 54	X.
	3745		523	0.988	247 21	137 27	101 41	- 3 29	x.
	3746		525	0.478	240 3	72 54	37 8	-12 44	Y.
	3747		525	0.465	241 15	71 12	35 26	-11 29	Y ⁰ .
	3748		525	0.469	242 29	67 29	31 43	-10 59	G ⁰ .
	3749		525	0.375	228 11	67 53	32 7	-10 58	G ¹ .
	3750		525	0.323	230 57	66 45	30 59	-12 49	g.
	3751		525	0.299	240 4	67 26	31 40	-11 38	H.
	3752		525	0.314	227 6	66 7	30 21	-10 4	h ¹ .
	3753		526	0.244	239 36	49 28	13 42	-15 12	W.
	3754		526	0.257	239 20	53 4	17 18	-15 50	w.
	3755		527	0.514	94 3	17 54	342 8	- 9 17	A ₁ .
	3756		527	0.522	93 19	18 19	342 33	- 9 11	A ₂ .
	3757		527	0.602	95 11	21 29	345 43	-10 22	a ₁ .
	3758		527	0.608	96 28	22 44	346 58	-10 37	a ₂ .
	3759		527	0.577	90 29	25 6	349 20	- 7 57	B.
	3760		527	0.573	89 54	26 17	350 31	- 5 13	b.
	3761		527	0.585	86 22	22 33	346 47	- 4 48	c.
	3762	29.636	523	0.988	247 52	138 3	102 5	- 4 50	X.
	3763		523	0.990	247 35	137 35	101 37	- 3 33	x.
	3764		525	0.479	239 54	73 20	37 22	-12 38	Y.
	3765		525	0.468	241 24	71 27	35 29	-11 34	Y ⁰ .
	3766		525	0.472	242 37	67 42	31 44	-11 2	G ⁰ .
	3767		525	0.378	228 5	68 10	32 12	-11 17	G ¹ .
	3768		525	0.327	230 59	66 46	30 48	-12 40	g.
	3769		525	0.302	240 13	67 25	31 27	-11 27	H.
	3770		525	0.316	228 10	66 27	30 29	-10 11	h ¹ .
	3771		526	0.248	239 33	49 48	13 50	-15 12	W.
	3772		526	0.260	239 51	53 24	17 26	-16 1	w.
	3773		527	0.512	94 17	18 11	342 13	- 9 22	A ₁ .
	3774		527	0.520	92 58	18 34	342 36	- 9 10	A ₂ .
	3775		527	0.600	95 17	21 56	345 58	-10 20	a ₁ .
	3776		527	0.606	96 33	23 8	347 10	-10 30	a ₂ .
	3777		527	0.577	90 12	25 9	349 11	- 7 50	B.
	3778		527	0.570	89 59	26 14	350 16	- 5 10	b.
	3779		527	0.582	86 16	22 40	346 42	- 4 43	c.
Feb. 4.	3780	34.464	527	0.512	252 17	88 49	344 22	- 8 11	A.
	3781		527	0.564	250 29	87 46	343 19	- 7 5	B.
	3782		527	0.577	251 38	87 29	343 2	- 7 42	C.
	3783		527	0.508	244 57	84 44	340 17	- 4 14	a.
	3784		527	0.612	239 1	85 8	340 41	- 3 50	b.
	3785		527	0.623	239 24	90 2	345 35	- 6 4	c.
	3786		528	0.470	60 57	32 43	288 16	+ 5 31	D.
	3787		528	0.472	61 13	33 57	289 30	+ 5 48	E.
	3788		528	0.481	62 2	33 19	288 52	+ 4 32	F.
	3789		528	0.512	64 11	30 22	285 55	+ 3 21	G.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Feb. 4.	3790	34.464	528	0.553	64° 47'	30° 44'	286° 17'	+3° 52'	H.
	3791		528	0.555	65 33	28 19	283 52	+3 49	d.
	3792		528	0.604	65 31	26 47	282 20	+2 1	e.
	3793		528	0.618	64 12	26 33	282 6	+7 45	f.
	3794		529	0.622	64 17	20 11	275 44	+7 38	g.
	3795		529	0.630	66 43	22 40	278 13	+6 19	h.
	3796	34.482	527	0.516	251 59	89 27	344 46	-8 8	A.
	3797		527	0.566	250 38	88 14	343 33	-7 12	B.
	3798		527	0.580	250 54	87 59	343 18	-7 44	C.
	3799		527	0.512	244 16	84 58	340 17	-4 18	a.
	3800		527	0.615	239 43	85 43	341 2	-4 1	b.
	3801		527	0.626	239 52	90 44	346 3	-5 55	c.
	3802		528	0.467	60 12	33 8	288 28	+5 30	D.
	3803		528	0.470	61 29	34 29	289 48	+5 50	E.
	3804		528	0.478	62 13	33 51	289 10	+4 21	F.
	3805		528	0.509	64 43	31 0	286 19	+3 30	G.
	3806		528	0.550	64 59	31 26	294 45	+3 59	H.
	3807		528	0.551	65 32	29 1	284 20	+3 40	d.
	3808		528	0.601	65 21	27 15	282 34	+2 24	e.
	3809		528	0.614	64 0	27 12	282 31	+7 50	f.
	3810		529	0.620	64 28	20 47	276 6	+7 38	g.
	3811		529	0.628	66 45	22 44	278 3	+6 24	h.
5.	3812	35.460	527	0.653	243 22	103 32	344 57	-8 14	A.
	3813		527	0.659	244 19	102 17	343 42	-7 2	B.
	3814		527	0.693	240 3	101 44	343 9	-7 55	C.
	3815		527	0.648	238 37	99 13	340 38	-4 32	a.
	3816		527	0.695	239 11	99 40	341 5	-4 12	b.
	3817		527	0.712	246 42	105 36	347 1	-5 53	c.
	3818		528	0.293	47 19	47 10	288 35	+5 14	D.
	3819		528	0.298	47 53	48 23	289 48	+6 11	E.
	3820		528	0.303	48 15	48 0	289 25	+4 16	F.
	3821		528	0.370	51 53	45 46	287 11	+3 21	G.
	3822		528	0.374	52 26	45 54	287 19	+4 17	H.
	3823		528	0.391	54 59	43 2	284 27	+3 44	d.
	3824		528	0.372	53 14	41 19	282 44	+2 28	e.
	3825		528	0.420	54 25	41 20	282 45	+7 40	f.
	3826		529	0.454	58 29	34 48	276 13	+7 27	g.
	3827		529	0.471	57 36	36 37	278 2	+6 37	h.
	3828	35.489	527	0.657	244 23	104 11	345 11	-8 12	A.
	3829		527	0.663	242 58	102 48	343 48	-7 8	B.
	3830		527	0.696	240 41	102 23	343 23	-7 59	C.
	3831		527	0.652	238 36	99 44	340 44	-4 22	a.
	3832		527	0.700	239 24	100 18	341 18	-4 16	b.
	3833		527	0.717	246 51	106 32	347 32	-5 55	c.
	3834		528	0.289	47 24	48 5	289 5	+5 19	D.
	3835		528	0.292	48 2	48 22	289 22	+6 7	E.
	3836		528	0.299	48 29	48 14	289 14	+4 1	F.
	3837		528	0.365	52 6	46 7	287 7	+3 31	G.
	3838		528	0.370	52 49	46 25	287 25	+4 26	H.
	3839		528	0.388	54 44	43 37	284 37	+3 40	d.
	3840		528	0.368	53 12	41 47	282 47	+2 25	e.
	3841		528	0.417	55 0	41 56	282 56	+7 41	f.
	3842		529	0.451	57 56	34 52	275 52	+7 34	g.
	3843		529	0.466	57 39	36 39	277 39	+6 33	h.
6.	3844	36.494	527	0.823	244 29	121 38	348 23	-4 23	a.
	3845		527	0.805	245 3	120 19	347 4	-3 38	b.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Feb. 6.	3846	36.494	527	0.817	245° 38'	119° 6'	345° 51'	— 5° 14'	c.
	3847		527	0.844	246 12	118 54	345 39	— 2 36	d.
	3848		527	0.859	247 52	117 25	344 10	— 1 28	e.
	3849		528	0.172	338 50	62 54	289 39	+ 7 16	A ⁰ .
	3850		528	0.173	338 47	62 1	288 46	+ 6 52	B ⁰ .
	3851		528	0.185	339 21	62 36	289 21	+ 7 19	C ⁰ .
	3852		528	0.196	340 0	60 4	286 49	+ 8 12	D ⁰ .
	3853		528	0.201	352 34	56 17	283 2	+ 5 13	E ⁰ .
	3854		528	0.211	1 16	56 28	283 13	+ 9 18	a ₁ .
	3855		528	0.217	1 9	54 9	280 54	+ 2 23	b ₁ .
	3856		528	0.166	2 28	55 13	281 58	+ 3 26	c ₁ .
	3857		528	0.168	3 47	55 29	282 14	+ 6 25	d ₁ .
	3858		528	0.202	8 18	54 39	281 24	+ 5 8	e ₁ .
	3859		528	0.219	9 54	54 27	281 12	+ 5 12	M.
	3860		528	0.225	10 45	53 18	280 3	+ 5 57	N.
	3861		529	0.260	29 12	50 14	276 59	+ 8 7	P.
	3862		529	0.284	30 47	50 13	276 58	+ 7 16	p.
	3863		529	0.245	31 4	49 28	276 13	+ 9 4	Q.
	3864		529	0.257	40 12	48 31	275 16	+ 9 6	q.
	3865		529	0.290	40 7	47 54	274 39	+ 10 16	q ⁰ .
	3866		530	0.484	88 24	34 22	261 7	— 6 23	R ¹ .
	3867		530	0.486	88 37	34 3	260 43	— 7 29	R ² .
	3868		530	0.495	92 3	32 28	259 13	— 7 54	r ¹ .
	3869		530	0.507	87 51	31 51	258 36	— 8 11	r ² .
	3870		530	0.523	86 28	29 14	255 59	— 9 54	S ¹ .
	3871		530	0.540	94 22	29 37	256 22	— 9 12	S ² .
	3872		530	0.558	89 57	29 58	256 43	— 10 2	s ¹ .
	3873		530	0.571	89 14	30 12	256 57	— 10 19	s ² .
	3874	36.523	527	0.829	244 38	122 19	348 40	— 4 22	a.
	3875		527	0.808	245 27	120 37	346 58	— 3 39	b.
	3876		527	0.820	244 57	119 54	346 15	— 5 16	c.
	3877		527	0.848	246 34	119 33	345 54	— 2 38	d.
	3878		527	0.864	247 43	118 1	344 22	— 1 29	e.
	3879		528	0.170	339 7	63 24	289 45	+ 7 22	A ⁰ .
	3880		528	0.171	338 59	63 36	289 57	+ 6 57	B ⁰ .
	3881		528	0.183	339 46	63 0	289 21	+ 7 28	C ⁰ .
	3882		528	0.194	339 51	60 14	286 35	+ 8 0	D ⁰ .
	3883		528	0.199	352 33	57 31	283 52	+ 5 14	E ⁰ .
	3884		528	0.209	1 24	57 2	283 23	+ 9 31	a ₁ .
	3885		528	0.217	0 58	54 38	280 59	+ 2 22	b ₁ .
	3886		528	0.163	2 39	55 44	282 5	+ 3 28	c ₁ .
	3887		528	0.164	3 43	55 57	282 18	+ 6 20	d ₁ .
	3888		528	0.200	8 17	55 36	281 57	+ 5 19	e ₁ .
	3889		528	0.215	10 1	55 2	281 23	+ 5 14	M.
	3890		528	0.221	10 44	53 27	279 48	+ 5 43	N.
	3891		529	0.260	30 14	50 29	276 50	+ 8 9	P.
	3892		529	0.281	20 41	50 16	276 37	+ 7 16	p.
	3893		529	0.241	31 21	49 49	276 10	+ 9 6	Q.
	3894		529	0.257	40 19	49 6	275 27	+ 9 16	q.
	3895		529	0.288	40 50	48 18	274 39	+ 10 24	q ⁰ .
	3896		530	0.482	88 21	34 57	261 18	— 6 28	R ¹ .
	3897		530	0.484	88 27	34 56	261 17	— 7 22	R ² .
	3898		530	0.491	92 28	32 20	258 41	— 7 50	r ¹ .
	3899		530	0.507	87 52	31 47	258 8	— 8 31	r ² .
	3900		530	0.523	86 30	29 29	255 50	— 9 50	S ¹ .
	3901		530	0.538	94 59	30 12	256 33	— 9 10	S ² .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Feb. 6.	3902	36.523	530	0.557	89 28	30 33	256 54	-10 4	s ¹ .
	3903		530	0.570	89 16	30 30	256 51	-10 24	s ² .
10.	3904	40.624	528	0.876	259 13	123 17	291 27	+ 8 19	A.
	3905		528	0.864	258 54	122 54	291 4	+ 7 26	B.
	3906		528	0.851	260 2	120 33	288 43	+ 2 29	a.
	3907		528	0.855	259 44	119 14	287 24	+ 6 45	b.
	3908		529	0.802	262 27	109 29	278 9	+ 7 48	C.
	3909		529	0.797	262 51	108 20	276 30	+ 7 49	D.
	3910		529	0.784	266 14	108 15	276 25	+ 8 13	E.
	3911		529	0.755	267 29	108 2	276 12	+ 8 40	F.
	3912		529	0.763	265 23	108 14	276 24	+ 7 13	c.
	3913		529	0.710	264 11	109 27	277 37	+ 9 57	d.
	3914		529	0.712	266 28	105 13	273 23	+10 22	e.
	3915		529	0.721	265 9	106 5	274 15	+10 14	f.
	3916		530	0.455	246 25	96 41	264 51	- 6 24	G.
	3917		530	0.463	245 39	95 21	263 31	- 7 19	H.
	3918		530	0.470	247 28	95 17	263 27	- 6 13	K.
	3919		530	0.420	247 32	93 18	261 28	- 8 23	M.
	3920		530	0.355	248 50	92 27	260 37	- 8 12	g.
	3921		530	0.370	248 56	94 38	262 48	-10 19	h.
	3922		530	0.341	249 6	88 21	256 31	-10 4	k.
	3923		530	0.312	249 38	87 25	255 35	- 9 54	m.
	3924	40.638	528	0.879	259 28	123 15	291 13	+ 8 24	A.
	3925		528	0.868	258 50	123 10	291 8	+ 7 25	B.
	3926		528	0.855	260 33	121 2	289 0	+ 2 31	a.
	3927		528	0.860	260 4	119 38	287 36	+ 6 40	b.
	3928		529	0.802	262 55	109 25	277 23	+ 7 53	C.
	3929		529	0.800	262 41	108 13	276 11	+ 7 49	D.
	3930		529	0.787	265 58	108 54	276 52	+ 8 13	E.
	3931		529	0.758	267 30	108 19	276 17	+ 8 35	F.
	3932		529	0.765	265 39	108 34	276 32	+ 7 15	c.
	3933		529	0.715	264 24	109 33	277 31	+ 9 51	d.
	3934		529	0.715	266 35	105 40	273 38	+10 20	e.
	3935		529	0.724	265 22	106 15	274 13	+10 19	f.
	3936		530	0.458	246 40	96 12	264 10	- 6 22	G.
	3937		530	0.468	245 51	95 37	263 35	- 7 17	H.
	3938		530	0.472	247 35	95 4	263 2	- 6 12	K.
	3939		530	0.422	247 40	93 28	261 26	- 8 15	M.
	3940		530	0.360	248 54	92 35	260 33	- 8 10	g.
	3941		530	0.372	249 11	94 24	262 22	-10 23	h.
	3942		530	0.345	250 0	88 20	256 18	-10 0	k.
	3943		530	0.315	249 16	87 29	255 27	- 9 55	m.
17.	3944	47.439	531	0.510	288 12	103 53	175 23	+19 12	A.
	3945		531	0.515	287 51	102 17	173 47	+21 2	B.
	3946		531	0.524	289 9	102 44	174 14	+18 57	C.
	3947		531	0.460	289 24	101 6	172 36	+17 26	D.
	3948		531	0.443	292 12	98 5	169 35	+17 24	a.
	3949		531	0.455	293 38	99 13	170 43	+20 9	b.
	3950		531	0.478	294 6	97 24	168 54	+16 13	c.
	3951		531	0.477	294 28	96 55	168 25	+16 54	d.
	3952		532	0.430	232 37	99 13	170 43	- 4 37	E.
	3953		532	0.428	230 28	94 19	165 49	- 3 38	F.
	3954		532	0.378	233 1	90 54	162 24	- 3 49	G.
	3955		533	0.054	99 6	75 12	146 42	+ 1 14	e.
	3956		533	0.059	100 4	76 33	147 3	+ 2 3	f.
	3957		533	0.095	185 16	73 50	145 20	- 1 29	g.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Feb. 17.	3958	47-439	533	0-099	184° 45'	71° 36'	143° 6'	- 3° 36'	h.
	3959		534	0-647	80 13	33 50	105 20	- 5 44	K.
	3960	47-470	534	0-643	81 17	33 37	105 7	- 5 40	k.
	3961		531	0-516	288 19	104 12	175 16	+19 13	A.
	3962		531	0-520	287 59	102 51	173 55	+21 10	B.
	3963		531	0-526	288 58	102 53	173 57	+18 53	C.
	3964		531	0-463	289 20	101 18	172 22	+17 30	D.
	3965		531	0-448	293 2	98 55	169 59	+17 28	a.
	3966		531	0-460	293 40	99 29	170 32	+20 13	b.
	3967		531	0-480	294 16	98 2	169 6	+16 25	c.
	3968		531	0-480	294 43	97 38	168 42	+16 55	d.
	3969		532	0-432	232 41	100 0	171 4	- 4 48	E.
	3970		532	0-431	230 30	94 36	165 40	- 3 40	F.
	3971		532	0-380	233 15	91 28	162 32	- 3 55	G.
	3972		533	0-055	99 27	75 47	146 51	+ 0 52	e.
	3973		533	0-061	100 43	76 58	148 2	+ 2 28	f.
	3974		533	0-096	186 3	73 58	145 2	- 1 31	g.
	3975		533	0-100	184 50	72 30	144 34	- 3 40	h.
	3976		534	0-645	80 21	34 14	105 18	- 5 55	K.
	3977		534	0-640	81 36	35 9	106 13	- 5 39	k.
	3978	47-546	531	0-521	288 24	105 8	175 7	+19 15	A.
	3979		531	0-524	287 55	104 11	174 10	+21 8	B.
	3980		531	0-531	289 11	104 32	174 31	+18 55	C.
	3981		531	0-467	289 40	102 19	172 18	+17 31	D.
	3982		531	0-455	293 31	100 3	170 2	+17 32	a.
	3983		531	0-463	293 44	100 31	170 30	+20 20	b.
	3984		531	0-484	294 28	99 17	169 16	+16 22	c.
	3985		531	0-485	294 27	98 52	168 51	+16 50	d.
	3986		532	0-433	233 3	101 6	171 5	- 4 51	E.
	3987		532	0-437	230 39	95 35	165 34	- 3 44	F.
	3988		532	0-384	233 42	92 4	162 3	- 3 56	G.
	3989		533	0-057	99 28	76 46	146 45	+ 0 47	e.
	3990		533	0-068	101 7	78 21	148 20	+ 2 30	f.
	3991		533	0-100	185 29	74 33	144 32	- 1 36	g.
	3992		533	0-105	185 2	73 35	143 34	- 4 2	h.
	3993		534	0-639	81 19	35 28	105 27	- 6 0	K.
	3994		534	0-637	81 49	36 18	106 17	- 5 44	k.
Mar. 2.	3995	60-638	535	0-888	268 54	148 37	32 54	+14 22	A.
	3996		535	0-893	267 59	148 13	32 30	+14 51	B.
	3997		535	0-864	267 2	146 30	30 47	+15 6	C.
	3998		535	0-860	269 14	146 1	30 18	+15 39	D.
	3999		535	0-859	268 0	147 19	31 36	+16 0	a.
	4000		536	0-775	233 16	133 54	18 11	-10 17	b.
	4001		536	0-760	234 51	133 39	17 56	-11 38	c.
	4002		536	0-758	234 28	133 12	17 29	-10 19	d.
	4003		536	0-756	235 4	127 28	11 45	-12 33	E.
	4004		536	0-670	233 52	128 19	12 36	-12 37	F.
	4005		536	0-693	233 58	128 3	12 20	-12 12	G.
	4006		536	0-666	236 39	128 29	12 46	-11 4	H.
	4007		537	0-360	328 42	87 31	331 48	+19 27	h.
	4008		537	0-363	329 4	86 44	331 1	+20 44	e.
	4009		537	0-365	330 21	85 29	329 46	+20 33	f.
	4010		537	0-357	340 40	83 14	327 31	+20 47	g.
	4011		537	0-377	346 9	83 12	327 29	+19 18	K.
	4012		537	0-365	345 37	80 33	324 50	+19 39	k.
	4013		537	0-382	349 58	81 46	326 3	+21 42	K ¹ .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 2.	4014	60·638	537	0·380	352° 14'	82° 29'	326° 46'	+21° 27'	k ¹ .
	4015		537	0·382	353 59	81 38	325 55	+18 14	k ² .
	4016		538	0·394	41 12	64 9	308 26	+10 1	S.
	4017		538	0·401	41 38	64 11	308 28	+10 7	s.
	4018		539	0·798	76 33	35 30	279 47	— 6 50	P.
	4019		539	0·792	76 12	35 47	279 4	— 6 33	p.
	4020		540	0·870	53 19	25 17	269 34	+18 11	Q.
	4021		540	0·875	54 37	26 32	270 49	+16 32	q ¹ .
	4022		540	0·866	52 26	26 39	270 56	+17 41	q ² .
	4023	60·658	535	0·890	269 3	148 53	32 53	+14 19	A.
	4024		535	0·895	267 34	148 36	32 36	+14 54	B.
	4025		535	0·867	266 54	147 1	31 1	+15 2	C.
	4026		535	0·861	269 23	146 12	30 12	+15 30	D.
	4027		535	0·859	268 13	147 28	31 28	+16 3	a.
	4028		536	0·777	233 41	133 55	17 55	—10 10	b.
	4029		536	0·763	235 0	134 2	18 2	—11 36	c.
	4030		536	0·760	234 29	133 39	17 39	—10 26	d.
	4031		536	0·759	235 6	127 50	11 50	—12 40	E.
	4032		536	0·672	233 57	128 36	12 36	—12 39	F.
	4033		536	0·695	234 13	128 34	12 34	—12 7	G.
	4034		536	0·668	236 40	129 4	13 4	—11 11	H.
	4035		537	0·363	328 49	88 12	332 12	+19 20	h.
	4036		537	0·365	329 19	87 59	331 59	+20 42	e.
	4037		537	0·367	330 22	86 0	330 0	+20 33	f.
	4038		537	0·360	340 45	83 42	327 42	+20 40	g.
	4039		537	0·380	346 19	83 40	327 40	+19 16	K.
	4040		537	0·366	346 43	81 0	325 0	+19 51	k.
	4041		537	0·384	350 8	82 13	326 13	+21 45	K ¹ .
	4042		537	0·383	352 24	82 46	326 46	+21 20	k ¹ .
	4043		537	0·384	354 16	81 26	325 26	+18 12	k ² .
	4044		538	0·392	41 1	64 38	308 38	+10 10	S.
	4045		538	0·399	41 32	64 36	308 36	+10 12	s.
	4046		539	0·796	76 34	35 33	279 33	— 6 54	P.
	4047		539	0·790	76 52	35 49	279 49	— 6 37	p.
	4048		540	0·868	53 16	25 27	269 27	+18 19	Q.
	4049		540	0·871	54 13	26 40	270 40	+16 30	q ₁ .
	4050		540	0·864	52 21	26 38	270 38	+17 44	q ₂ .
4.	4051	62·678	536	0·970	235 16	155 13	10 34	—12 31	M.
	4052		536	0·963	236 23	156 49	12 10	—12 17	N.
	4053		536	0·956	234 48	156 1	11 22	—13 38	O.
	4054		536	0·944	233 59	159 35	14 56	—13 3	m.
	4055		536	0·931	235 50	162 44	18 5	—14 2	n.
	4056		536	0·924	237 2	165 28	20 49	—14 19	o.
	4057		537	0·558	282 42	121 53	337 14	+19 39	A.
	4058		537	0·550	288 19	112 34	327 55	+19 50	B.
	4059		537	0·563	283 24	114 9	329 30	+19 36	C.
	4060		537	0·520	287 36	114 17	329 38	+20 14	D.
	4061		537	0·533	285 5	115 56	331 17	+19 15	a.
	4062		537	0·547	287 49	116 44	332 5	+20 33	b.
	4063		537	0·519	286 43	117 21	332 42	+20 13	c.
	4064		538	0·221	300 11	98 29	313 50	+11 38	P.
	4065		538	0·239	302 21	98 54	314 15	+10 41	p.
	4066		538	0·216	301 4	99 8	314 29	+10 17	q.
	4067		539 _a	0·442	86 29	65 11	280 32	— 4 10	F.
	4068		539 _a	0·446	86 45	65 27	280 48	— 6 46	f.
	4069		540 _a	0·555	41 12	60 49	275 10	+18 0	G ^o .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 4.	4070	62.678	540a	0.559	42° 29'	60° 52'	276° 13'	+18° 13'	G ¹ .
	4071		540a	0.531	43 38	59 14	274 35	+17 28	G ² .
	4072	62.695	536	0.973	236 14	155 28	10 34	-12 35	M.
	4073		536	0.965	236 57	157 9	12 15	-12 19	N.
	4074		536	0.958	235 2	156 28	11 34	-13 30	O.
	4075		536	0.950	233 18	160 4	15 10	-13 10	m.
	4076		536	0.936	236 9	163 19	18 25	-14 9	n.
	4077		536	0.925	236 51	165 55	21 1	-14 22	o.
	4078		537	0.560	283 13	122 28	337 34	+19 50	A.
	4079		537	0.553	288 11	112 40	327 46	+19 59	B.
	4080		537	0.565	283 44	114 45	329 51	+19 40	C.
	4081		537	0.522	288 0	114 21	329 27	+20 17	D.
	4082		537	0.536	285 41	116 20	331 26	+19 16	a.
	4083		537	0.549	287 18	117 12	332 18	+20 30	b.
	4084		537	0.521	286 40	117 54	333 0	+20 16	c.
	4085		538	0.222	300 29	98 42	313 48	+11 35	P.
	4086		538	0.241	302 44	99 13	314 19	+10 47	p.
	4087		538	0.218	300 55	99 47	314 53	+10 19	q.
	4088		539	0.440	86 39	65 31	280 37	-4 11	F.
	4089		539	0.444	87 3	65 35	280 41	-6 50	f.
	4090		540	0.553	41 24	60 51	275 57	+17 52	G ⁰ .
	4091		540	0.556	42 32	61 14	276 20	+18 1	G ¹
	4092		540	0.527	43 37	59 38	274 44	+17 36	G ²
10.	4093	68.702	540	0.822	265 23	153 2	282 56	+18 42	g ₁ .
	4094		540	0.826	265 51	154 51	284 45	+17 54	g ₂ .
	4095		541	0.562	31 19	66 30	196 24	+22 27	A.
	4096		541	0.571	31 28	65 19	195 13	+22 6	B.
	4097		541	0.578	33 4	65 24	195 18	+23 19	C.
	4098		541	0.590	32 41	63 53	193 47	+22 33	D.
	4099		541	0.601	33 35	63 47	193 41	+24 54	a.
	4100		541	0.613	34 59	64 40	194 34	+23 21	b.
	4101		541	0.628	35 6	64 17	194 11	+22 19	c.
	4102		541	0.644	35 7	60 0	189 54	+24 15	d.
	4103		542	0.540	74 29	63 31	193 25	-4 54	X.
	4104		542	0.549	75 34	62 46	192 40	-4 45	x.
	4105		542	0.552	75 56	62 19	192 13	-3 9	Y.
	4106		542	0.694	76 28	50 11	180 5	-3 41	y.
	4107		543	0.930	59 38	28 50	158 44	+7 18	M.
	4108		543	0.932	60 11	27 32	157 26	+7 26	n.
	4109	68.712	540	0.825	265 28	153 19	283 5	+18 47	g ₁ .
	4110		540	0.830	266 2	155 4	284 50	+17 49	g ₂ .
	4111		541	0.560	31 23	66 41	286 27	+22 28	A.
	4112		541	0.569	31 46	65 22	195 8	+22 14	B.
	4113		541	0.577	33 9	65 50	195 36	+23 37	C.
	4114		541	0.588	33 10	64 1	193 47	+22 34	D.
	4115		541	0.597	34 2	63 58	193 44	+24 50	a.
	4116		541	0.609	35 50	64 47	194 33	+23 17	b.
	4117		541	0.624	34 49	65 0	194 46	+22 16	c.
	4118		541	0.640	35 12	60 17	190 3	+24 8	d.
	4119		542	0.536	76 13	63 52	193 38	-4 33	X.
	4120		542	0.545	75 55	62 57	192 43	-4 46	x.
	4121		542	0.550	76 38	62 25	192 11	-3 9	Y.
	4122		542	0.692	76 13	50 37	180 23	-3 48	y.
	4123		543	0.928	60 47	29 8	158 54	+7 20	M.
	4124		543	0.930	60 47	28 29	158 15	+7 28	n.
11.	4125	69.652	540	0.920	258 52	165 45	282 11	+17 17	g ⁰ .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 11.	4126	69·652	540	0·918	259 27	168 13	284 39	+18 54	g ¹ .
	4127		541	0·471	13 8	78 53	195 19	+21 19	A ⁰ .
	4128		541	0·483	14 34	78 51	195 17	+22 3	B ⁰ .
	4129		541	0·490	13 28	79 18	195 44	+24 36	C ⁰ .
	4130		541	0·492	16 25	80 48	197 14	+22 47	D ⁰ .
	4131		541	0·506	18 24	75 57	192 23	+24 11	a ¹ .
	4132		541	0·511	20 21	77 12	193 38	+22 50	b ¹ .
	4133		541	0·528	21 37	74 15	190 41	+23 38	c ¹ .
	4134		541	0·532	22 50	74 3	190 29	+22 9	d ¹ .
	4135		542	0·388	77 9	77 36	194 2	- 4 9	X.
	4136		542	0·390	77 32	76 18	192 44	- 4 26	x.
	4137		542	0·397	78 14	75 19	191 45	- 3 52	Y.
	4138		542	0·408	78 32	65 51	182 17	- 3 37	y.
	4139		543	0·855	56 56	43 1	159 27	+ 7 49	M.
	4140		543	0·861	56 4	42 42	159 8	+ 7 18	n.
	4141	69·667	540	0·923	258 40	165 53	282 5	+17 15	g ⁰ .
	4142		540	0·921	260 11	168 40	284 52	+19 0	g ¹ .
	4143		541	0·468	13 7	79 7	195 19	+21 14	A ⁰ .
	4144		541	0·480	14 58	79 0	195 12	+22 16	B ⁰ .
	4145		541	0·486	13 26	79 46	195 58	+24 25	C ⁰ .
	4146		541	0·490	16 17	80 57	197 9	+22 32	D ⁰ .
	4147		541	0·503	18 33	75 52	192 4	+24 10	a ¹ .
	4148		541	0·509	20 29	77 44	193 56	+22 56	b ¹ .
	4149		541	0·527	21 14	74 29	190 41	+23 49	c ¹ .
	4150		541	0·530	23 8	74 30	190 42	+22 8	d ¹ .
	4151		542	0·386	77 6	77 54	194 6	- 4 17	X.
	4152		542	0·388	77 51	76 33	192 45	- 4 30	x.
	4153		542	0·393	78 23	75 31	191 43	- 3 57	Y.
	4154		542	0·406	78 41	66 9	182 21	- 3 31	y.
	4155		543	0·851	56 41	43 12	159 24	+ 7 49	M.
	4156		543	0·857	56 0	43 1	159 13	+ 7 23	n.
12.	4157	70·518	540	0·973	258 13	178 59	283 7	+17 12	g ⁰ .
	4158		540	0·976	259 56	179 31	283 39	+18 38	g ¹ .
	4159		541	0·381	357 14	93 17	197 25	+20 17	A.
	4160		541	0·391	359 50	94 1	198 9	+22 13	B.
	4161		541	0·386	358 7	91 28	195 36	+21 45	C.
	4162		541	0·402	4 41	88 55	193 3	+22 53	a.
	4163		541	0·417	3 26	89 34	193 42	+23 19	b.
	4164		541	0·430	3 20	87 16	191 24	+23 36	c.
	4165		542	0·182	94 25	90 12	194 20	- 5 6	D.
	4166		542	0·187	93 17	90 2	194 10	- 4 41	E.
	4167		542	0·191	95 21	89 10	193 18	- 3 52	d.
	4168		542	0·206	94 38	88 46	192 54	- 3 38	e.
16.	4169	74·507	543	0·722	55 13	56 37	160 45	+ 7 16	f.
	4170		543	0·725	55 47	57 58	162 6	+ 8 4	g.
	4171		541	0·783	273 6	150 11	197 45	+18 22	M.
	4172		541	0·784	272 19	149 37	197 11	+18 47	m ⁰ .
	4173		541	0·775	272 53	150 4	197 38	+19 30	m ¹ .
	4174		541	0·762	273 21	146 27	194 1	+19 12	m ² .
	4175		541	0·754	272 16	145 21	192 55	+20 44	N.
	4176		541	0·755	274 40	147 9	194 43	+21 29	N ⁰ .
	4177		541	0·746	273 11	143 16	190 50	+19 30	n.
	4178		541	0·749	270 2	144 47	192 21	+22 21	n ¹ .
	4179		541	0·700	275 33	144 11	191 45	+23 56	n ¹ .
	4180		542	0·740	235 44	147 34	195 8	- 6 14	G.
	4181		542	0·743	233 10	148 39	196 13	- 5 13	H.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 16.	4182	74.507	542	0.736	236° 58'	148° 11'	195° 45'	— 4° 45'	g.
	4183		543	0.254	288 27	112 15	159 49	+ 8 25	S.
	4184		543	0.261	289 8	109 2	156 36	+ 7 0	s.
	4185		544	0.976	71 0	22 57	70 31	— 4 4	P.
	4186		544	0.962	72 57	23 42	71 16	— 4 56	p.
	4187		544	0.958	71 16	21 32	69 6	— 5 39	Q.
	4188	74.536	541	0.786	273 38	151 0	198 14	+18 27	M.
	4189		541	0.788	272 14	149 46	197 0	+18 59	m ⁰ .
	4190		541	0.778	272 55	149 57	197 11	+19 33	m ¹ .
	4191		541	0.764	273 16	146 16	193 30	+19 17	m ² .
	4192		541	0.758	272 18	145 58	193 12	+20 38	N.
	4193		541	0.759	274 59	147 23	194 37	+21 32	N ⁰ .
	4194	17.	541	0.750	273 44	143 19	190 33	+19 47	n.
	4195		541	0.753	269 51	144 37	191 51	+22 24	n ⁰ .
	4196		541	0.703	275 43	144 18	191 32	+24 0	n ¹ .
	4197		542	0.742	235 40	147 30	194 44	— 6 16	G.
	4198		542	0.745	233 18	148 45	195 59	— 5 9	H.
	4199		542	0.739	237 2	148 22	195 36	— 4 37	g.
	4200		543	0.258	289 3	112 14	159 28	+ 8 22	S.
	4201		543	0.264	289 40	109 47	157 1	+ 7 11	s.
	4202		544	0.975	71 12	23 50	71 4	— 4 3	P.
	4203		544	0.960	73 14	23 57	71 11	— 5 2	p.
	4204		544	0.956	71 15	21 35	68 49	— 5 43	Q.
	4205	75.610	541	0.902	264 46	166 16	198 11	+18 37	A.
	4206		541	0.897	262 21	164 38	196 33	+21 30	B.
	4207		541	0.860	262 34	161 41	193 36	+19 33	C.
	4208		541	0.857	263 19	163 7	195 2	+18 4	a.
	4209		541	0.862	264 48	160 21	192 16	+17 48	b.
	4210		542	0.884	232 9	164 21	196 16	— 6 47	D.
	4211	17.	542	0.887	232 41	165 54	197 49	— 5 56	d.
	4212		543	0.443	262 11	127 22	159 17	+ 8 39	E.
	4213		543	0.446	262 27	125 47	157 42	+ 9 14	e.
	4214		544	0.881	67 20	38 42	70 37	— 6 56	F.
	4215		544	0.883	68 59	38 13	70 8	— 4 21	f.
	4216		544	0.897	69 2	38 14	70 9	— 5 29	g.
	4217		545	0.940	69 50	26 2	57 57	— 8 28	M.
	4218		545	0.951	68 57	25 52	57 47	— 8 43	N.
	4219		545	0.952	70 7	25 19	57 14	— 9 56	O.
	4220		546	0.975	50 23	12 42	44 37	+11 5	P.
	4221		546	0.979	50 37	11 41	43 36	+10 19	p.
	4222	75.648	541	0.907	265 3	167 0	198 23	+18 40	A.
	4223		541	0.899	262 29	164 52	196 15	+21 32	B.
	4224		541	0.865	262 35	162 18	193 41	+19 30	C.
	4225		541	0.861	263 11	163 50	195 13	+18 6	a.
	4226		541	0.866	264 52	160 51	192 14	+17 52	b.
	4227		542	0.889	232 21	164 38	196 1	— 6 43	D.
	4228	17.	542	0.891	232 37	166 27	197 50	— 6 2	d.
	4229		543	0.449	262 32	127 49	159 12	+ 8 43	E.
	4230		543	0.454	262 4	126 18	157 41	+ 9 17	e.
	4231		544	0.879	67 19	39 4	70 27	— 6 51	F.
	4232		544	0.876	69 2	38 46	70 9	— 4 19	f.
	4233		544	0.892	69 55	38 39	70 2	— 5 38	g.
	4234		545	0.938	69 42	26 31	57 54	— 8 26	M.
	4235		545	0.948	69 13	26 17	57 40	— 8 40	N.
	4236		545	0.950	70 8	25 41	57 4	—10 1	O.
	4237		546	0.973	50 30	12 45	44 8	+11 4	P.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. ar. 17.	4238	75.648	546	0.978	50 44	12 14	43 37	+10 22	p.
18.	4239	76.486	541	0.965	261 52	180 26	199 55	+19 4	M.
	4240		541	0.962	262 19	179 33	199 2	+19 31	N.
	4241		541	0.960	261 27	181 37	200 1	+21 32	m.
	4242		541	0.953	262 36	180 41	199 10	+20 33	n.
	4243		542	0.962	233 45	179 50	199 19	- 7 6	O.
	4244		542	0.967	234 1	180 39	200 8	- 6 11	o.
	4245		543	0.570	255 22	140 22	159 51	+ 9 54	P.
	4246		543	0.572	256 16	141 18	160 47	+ 8 34	p.
	4247		544	0.762	69 16	54 17	73 46	- 3 9	Q.
	4248		544	0.773	70 28	56 7	75 36	- 3 57	q.
	4249		544	0.791	69 57	56 24	75 53	- 5 18	r.
	4250		545	0.858	71 13	42 21	61 50	- 8 26	R.
	4251		545	0.861	71 26	42 56	62 25	- 8 13	S.
	4252		545	0.863	72 44	40 36	60 5	- 7 52	s.
	4253		546	0.894	49 59	27 19	46 48	+11 19	X.
	4254		546	0.892	50 55	26 16	45 45	+12 49	x.
	4255		546	0.903	50 14	28 42	48 11	+13 4	Y.
	4256		546	0.950	51 6	24 36	44 2	+11 27	y.
	4257	76.500	541	0.967	262 7	180 34	199 51	+19 8	M.
	4258		541	0.964	262 39	179 56	199 13	+19 30	N.
	4259		541	0.961	261 18	182 0	201 17	+21 25	m.
	4260		541	0.956	262 54	180 55	200 12	+20 39	n.
	4261		542	0.964	233 37	180 13	199 30	- 7 12	O.
	4262		542	0.969	233 59	180 53	200 10	- 6 13	o.
	4263		543	0.572	255 28	140 39	159 46	+ 9 58	P.
	4264		543	0.575	256 56	141 52	161 9	+ 8 30	p.
	4265		544	0.760	70 2	54 39	73 56	- 3 10	Q.
	4266		544	0.771	70 34	56 35	75 52	- 3 57	q.
	4267		544	0.790	69 50	56 56	76 13	- 5 25	r.
	4268		545	0.856	71 12	42 25	61 42	- 8 30	R.
	4269		545	0.859	71 48	43 9	62 26	- 8 11	S.
	4270		545	0.860	72 46	40 50	60 7	- 7 50	s.
	4271		546	0.892	49 42	27 25	46 42	+11 23	X.
	4272		546	0.890	50 51	26 33	45 50	+12 54	x.
	4273		546	0.901	50 29	28 58	48 15	+13 7	Y.
	4274		546	0.948	51 22	25 9	44 26	+11 27	y.
19.	4275	77.512	543	0.763	249 6	153 16	158 12	+10 2	A.
	4276		543	0.770	250 14	154 28	159 24	+ 8 37	B.
	4277		543	0.771	251 33	156 8	161 4	+ 9 42	C.
	4278		544	0.572	64 22	67 32	72 28	- 3 14	D.
	4279		544	0.583	65 19	70 23	75 19	- 4 33	a.
	4280		544	0.575	68 18	71 26	76 22	- 3 45	b.
	4281		544	0.591	67 51	71 59	76 55	- 5 52	c.
	4282		544	0.584	68 46	69 37	74 33	- 3 19	d.
	4283		544	0.595	67 19	69 40	74 36	- 4 0	e.
	4284		545	0.689	69 24	56 17	61 13	- 8 36	E.
	4285		545	0.712	68 37	57 23	62 19	- 7 31	F.
	4286		545	0.694	68 45	57 49	62 45	- 8 28	G.
	4287		545	0.701	69 2	55 8	60 4	- 9 23	f.
	4288		545	0.722	70 5	55 35	60 31	- 7 7	g.
	4289		546	0.780	44 19	40 54	45 50	+11 18	K.
	4290		546	0.782	43 52	43 42	48 38	+12 36	k.
	4291		546	0.790	45 0	39 26	44 22	+12 39	M.
	4292		546	0.796	44 36	42 57	47 53	+13 25	m.
	4293	77.534	543	0.768	249 18	153 40	158 17	+10 4	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 19.	4294	77.534	543	0.772	250 13	154 44	159 21	+ 8 41	B.
	4295		543	0.774	252 27	156 19	160 56	+ 9 40	C.
	4296		544	0.569	64 26	67 53	72 30	- 3 15	D.
	4297		544	0.578	65 0	70 38	75 15	- 4 37	a.
	4298		544	0.572	68 13	71 54	76 31	- 3 39	b.
	4299		544	0.589	67 40	72 22	76 59	- 5 51	c.
	4300		544	0.582	69 4	69 50	74 27	- 3 17	d.
	4301		544	0.592	67 11	70 2	74 39	- 4 1	e.
	4302		545	0.687	69 22	57 8	61 45	- 8 34	E.
	4303		545	0.710	68 54	57 59	62 36	- 7 25	F.
	4304		545	0.693	69 6	58 10	62 47	- 8 26	G.
	4305		545	0.695	69 14	55 35	60 12	- 9 19	f.
	4306		545	0.719	70 42	56 38	61 5	- 7 11	g.
	4307		546	0.776	44 23	41 15	45 52	+11 19	K.
	4308		546	0.780	44 16	43 56	48 33	+12 44	k.
	4309		546	0.786	45 28	39 52	44 29	+12 41	M.
	4310		546	0.794	44 31	43 9	47 46	+13 16	m.
23.	4311	81.530	544	0.304	239 13	126 18	74 15	- 2 17	A.
	4312		544	0.319	240 28	124 46	72 43	- 2 37	a.
	4313		545	0.170	237 6	119 51	67 48	- 3 21	B.
	4314		545	0.182	237 54	116 52	64 49	- 2 35	b.
	4315		546 _a	0.322	317 34	115 36	63 33	+14 48	C.
	4316		546 _a	0.327	316 25	115 1	63 58	+15 2	c.
	4317		547	0.570	37 12	76 33	24 30	+17 50	D.
	4318		547	0.572	38 48	75 29	23 26	+18 22	E.
	4319		547	0.581	37 24	76 14	24 11	+17 23	d.
	4320		547	0.584	36 3	77 47	25 44	+18 47	e.
	4321		548	0.740	43 17	63 9	11 6	+20 34	F.
	4322		548	0.742	42 46	64 6	12 3	+19 0	f.
	4323		548	0.755	43 49	62 27	10 24	+19 8	g.
29.	4324	87.476	547	0.781	264 3	167 27	31 3	+17 16	A.
	4325		547	0.784	265 19	166 37	30 13	+17 58	B.
	4326		547	0.796	265 37	167 42	31 18	+18 40	a.
	4327		547	0.799	265 23	164 9	27 45	+17 18	b.
	4328		548	0.619	272 45	155 36	19 12	+20 22	C.
	4329		548	0.640	272 44	154 31	18 7	+19 36	D.
	4330		548	0.622	274 26	153 15	16 51	+21 4	E.
	4331		548	0.637	273 50	155 44	19 20	+20 45	c.
	4332		548	0.643	274 55	152 41	16 17	+19 58	d.
	4333		549	0.355	355 9	108 26	332 2	+21 27	F.
	4334		549	0.360	358 42	106 21	329 57	+21 9	G.
	4335		549	0.364	0 36	108 47	332 23	+23 50	H.
	4336		549	0.390	357 4	104 34	328 10	+23 19	e.
	4337		549	0.401	359 47	103 50	327 26	+22 18	f.
	4338		549	0.372	0 34	105 52	329 28	+33 32	g.
	4339		549	0.422	2 32	104 28	328 4	+21 37	h.
	4340		549	0.420	3 28	104 6	327 42	+22 1	m.
	4341	87.561	550	0.870	47 0	55 34	279 10	+17 50	X.
	4342		550	0.873	48 16	55 12	278 48	+16 24	x.
	4343		547	0.786	264 26	168 24	30 48	+17 22	A.
	4344		547	0.788	265 33	167 32	29 56	+18 3	B.
	4345		547	0.799	265 21	168 40	31 4	+18 47	a.
	4346		547	0.802	265 17	165 2	27 26	+17 25	b.
	4347		548	0.622	272 44	156 27	18 51	+20 19	C.
	4348		548	0.641	272 59	155 19	17 43	+19 42	D.
	4349		548	0.625	274 35	154 2	16 26	+21 15	E.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Mar. 29.	4350	87.561	548	0.640	273° 49'	156° 50'	19° 14'	+21° 0'	c.
	4351		548	0.645	274 51	153 37	16 1	+19 52	d.
	4352		549	0.353	356 13	109 20	331 44	+21 27	F.
	4353		549	0.361	358 49	107 11	329 35	+21 12	G.
	4354		549	0.362	359 59	109 31	331 55	+23 54	H.
	4355		549	0.389	357 25	105 26	327 50	+23 22	e.
	4356		549	0.402	359 30	104 28	326 52	+22 20	f.
	4357		549	0.370	1 2	106 43	329 27	+23 40	g.
	4358		549	0.420	2 46	105 16	327 40	+21 38	h.
	4359		549	0.421	3 27	104 55	327 19	+22 9	m.
	4360		550	0.868	47 19	56 24	278 48	+17 56	X.
	4361		550	0.870	48 31	56 9	278 33	+16 33	x.
30.	4362	88.659	547	0.902	257 27	181 0	27 53	+17 39	S.
	4363		547	0.899	256 34	183 38	30 31	+17 36	R.
	4364		547	0.889	257 31	181 10	28 3	+18 27	s.
	4365		548	0.795	261 26	169 56	16 49	+19 3	P.
	4366		548	0.799	263 4	171 23	18 16	+21 6	Q.
	4367		548	0.803	261 9	169 49	16 42	+20 14	M.
	4368		548	0.814	262 18	170 54	17 47	+19 8	p.
	4369		548	0.843	263 15	171 37	18 30	+20 12	q.
	4370		548	0.831	263 35	170 37	17 30	+21 39	m.
	4371		549	0.440	302 56	122 52	329 45	+23 41	A.
	4372		549	0.436	301 5	118 26	325 19	+22 22	B.
	4373		549	0.442	301 22	124 15	331 8	+22 37	C.
	4374		549	0.376	306 29	121 24	328 17	+21 7	D.
	4375		549	0.382	308 33	120 27	327 20	+23 28	a.
	4376		549	0.379	307 32	123 20	330 13	+22 22	b.
	4377		549	0.378	309 54	119 2	325 55	+20 18	c.
	4378		549	0.370	321 47	120 3	326 56	+21 3	d.
	4379		549	0.369	321 11	119 30	326 23	+23 28	e.
	4380		549	0.366	322 16	118 32	325 25	+22 55	f.
	4381		550	0.730	40 26	70 59	277 52	+16 29	Y.
	4382		550	0.728	41 45	72 11	279 4	+17 14	y.
	4383	88.672	547	0.905	257 38	181 12	27 50	+17 42	S.
	4384		547	0.902	256 22	183 48	30 26	+17 30	R.
	4385		547	0.892	257 19	181 17	27 55	+18 28	s.
	4386		548	0.796	261 38	170 2	16 40	+19 12	P.
	4387		548	0.802	263 19	171 48	18 26	+21 12	Q.
	4388		548	0.806	261 2	170 13	16 51	+20 12	M.
	4389		548	0.816	262 37	171 13	17 51	+19 37	p.
	4390		548	0.845	263 41	171 46	18 24	+20 22	q.
	4391		548	0.835	263 18	170 33	17 11	+21 41	m.
	4392		549	0.442	303 12	123 17	329 55	+23 39	A.
	4393		549	0.437	300 59	118 39	325 17	+22 31	B.
	4394		549	0.444	301 28	124 18	330 56	+22 40	C.
	4395		549	0.377	306 34	121 50	328 28	+21 9	D.
	4396		549	0.384	308 35	120 44	327 22	+23 29	a.
	4397		549	0.381	307 31	123 38	330 16	+22 20	b.
	4398		549	0.379	309 50	119 14	325 52	+20 19	c.
	4399		549	0.374	321 36	119 52	326 30	+21 14	d.
	4400		549	0.372	321 0	119 53	326 31	+23 30	e.
	4401		549	0.369	322 28	119 2	325 40	+23 4	f.
	4402		550	0.726	40 14	71 16	277 54	+16 30	Y.
	4403		550	0.725	41 36	72 35	279 13	+17 20	y.
31.	4404	89.438	547	0.962	263 11	192 54	28 40	+17 12	A.
	4405		547	0.963	264 37	194 47	30 33	+18 19	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864 Mar. 31.	4406	89·438	547	0·968	264 41	194 31	30 17	+18 6	C.
	4407		548	0·892	264 14	179 30	15 16	+18 57	A'.
	4408		548	0·902	263 9	183 30	19 16	+19 13	B'.
	4409		548	0·895	262 26	182 42	18 28	+21 40	C'.
	4410		548	0·897	265 57	182 55	18 41	+21 12	a.
	4411		548	0·903	266 56	181 6	16 52	+20 43	b.
	4412		548	0·906	265 25	181 26	17 12	+21 9	c.
	4413		549	0·518	290 40	134 20	330 6	+24 2	D.
	4414		549	0·521	291 18	135 57	331 43	+23 50	E.
	4415		549	0·464	295 57	130 51	326 37	+20 56	F.
	4416		549	0·462	297 6	129 41	325 27	+21 40	d.
	4417		549	0·431	303 13	134 3	329 49	+22 37	e.
	4418		549	0·427	302 12	137 8	332 54	+23 28	f.
	4419		550	0·608	39 44	85 9	280 55	+16 28	G.
	4420		550	0·609	38 33	82 23	278 9	+17 19	g.
	4421	89·500	547	0·963	263 19	193 39	28 33	+17 11	A.
	4422		547	0·965	264 53	195 52	30 46	+18 25	B.
	4423		547	0·970	265 7	195 21	30 15	+18 19	C.
	4424		548	0·894	264 33	180 25	15 19	+19 2	A'.
	4425		548	0·904	263 51	186 56	19 50	+19 11	B'.
	4426		548	0·897	262 34	183 42	18 36	+21 44	C'.
	4427		548	0·899	265 12	184 3	18 57	+21 8	a.
	4428		548	0·906	267 28	181 46	16 40	+20 40	b.
	4429		548	0·910	266 0	182 25	17 19	+21 15	c.
	4430		549	0·520	291 7	135 20	330 14	+24 0	D.
	4431		549	0·523	291 52	136 21	331 15	+23 55	E.
	4432		549	0·468	296 22	131 50	326 44	+20 59	F.
	4433		549	0·465	297 31	130 27	325 21	+21 48	d.
	4434		549	0·431	303 16	134 42	329 36	+22 33	e.
	4435		549	0·430	302 41	138 1	332 55	+23 37	f.
	4436		550	0·605	40 12	85 48	280 42	+16 19	G.
	4437		550	0·607	38 50	83 24	278 18	+17 24	g.
Apr. 1.	4438	90·432	548	0·972	257 38	194 34	16 15	+20 41	M.
	4439		548	0·980	259 19	197 21	19 2	+19 13	M ⁰ .
	4440		548	0·970	258 13	198 48	20 29	+21 27	m.
	4441		548	0·983	259 27	196 49	18 30	+20 56	m ⁰ .
	4442		549	0·676	274 23	147 57	329 38	+23 38	A.
	4443		549	0·672	274 24	149 52	331 33	+24 24	B.
	4444		549	0·680	275 54	144 30	326 11	+22 57	C.
	4445		549	0·692	276 13	146 33	328 14	+21 52	D.
	4446		549	0·590	274 11	151 27	333 8	+20 25	a.
	4447		549	0·586	275 0	151 28	333 9	+19 29	b.
	4448		549	0·582	282 50	144 1	325 42	+24 31	c.
	4449		549	0·550	282 6	145 2	326 43	+20 30	d.
	4450		549	0·553	283 7	147 16	328 57	+23 52	e.
	4451		550	0·464	26 23	99 36	281 17	+16 11	G.
	4452		550	0·471	26 29	96 45	278 26	+17 7	g.
	4453	90·455	548	0·974	257 33	195 18	16 39	+20 45	M.
	4454		548	0·981	258 56	197 59	19 20	+19 17	M ⁰ .
	4455		548	0·973	258 35	198 53	20 14	+21 23	m.
	4456		548	0·986	259 35	197 15	18 36	+21 0	m ⁰ .
	4457		549	0·680	274 28	148 16	329 37	+23 34	A.
	4458		549	0·673	274 26	150 9	331 30	+24 27	B.
	4459		549	0·682	276 1	144 54	326 15	+23 2	C.
	4460		549	0·694	276 18	146 58	328 19	+21 48	D.
	4461		549	0·591	274 10	151 39	333 0	+20 25	a.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Apr. 1.	4462	90.455	549	0.588	275° 15'	151° 33'	332° 54'	+19° 36'	b.
	4463		549	0.584	283° 3'	144° 12'	325° 33'	+24° 30'	c.
	4464		549	0.555	282° 17'	145° 20'	326° 41'	+20° 25'	d.
	4465		549	0.557	283° 16'	147° 38'	328° 59'	+23° 46'	e.
	4466		550	0.462	26° 54'	100° 7'	281° 28'	+16° 16'	G.
2.	4467	91.496	550	0.468	27° 13'	97° 11'	278° 32'	+17° 20'	g.
	4468		549	0.836	265° 21'	165° 32'	332° 7'	+22° 26'	A ⁰ .
	4469		549	0.821	266° 38'	163° 16'	329° 51'	+21° 4'	B ⁰ .
	4470		549	0.804	267° 7'	159° 37'	326° 12'	+20° 54'	C ⁰ .
	4471		549	0.762	264° 54'	161° 55'	328° 30'	+22° 30'	a ⁰ .
	4472	91.506	549	0.760	265° 37'	157° 26'	324° 1'	+22° 28'	b ⁰ .
	4473		550	0.344	355° 16'	112° 54'	279° 29'	+16° 58'	G.
	4474		549	0.839	265° 34'	165° 49'	332° 15'	+22° 30'	A ⁰ .
	4475		549	0.823	265° 0'	163° 32'	229° 58'	+21° 8'	B ⁰ .
	4476		549	0.806	266° 59'	159° 45'	326° 11'	+21° 2'	C ⁰ .
	4477	97.474	549	0.765	264° 52'	162° 13'	328° 39'	+22° 23'	a ⁰ .
	4478		549	0.761	265° 33'	157° 45'	324° 11'	+22° 40'	b ⁰ .
	4479		550	0.345	355° 19'	113° 10'	279° 36'	+17° 1'	G.
	4480		551	0.968	256° 16'	204° 1'	285° 48'	+13° 45'	A.
	4481		551	0.954	257° 50'	206° 35'	288° 22'	+13° 12'	B.
8.	4482	97.506	551	0.955	259° 21'	205° 38'	287° 25'	+14° 52'	a.
	4483		551	0.946	260° 37'	206° 58'	288° 45'	+15° 47'	b.
	4484		552	0.895	261° 48'	188° 56'	270° 43'	+18° 35'	C.
	4485		552	0.884	263° 44'	189° 1'	270° 48'	+17° 26'	D.
	4486		552	0.888	263° 32'	187° 1'	268° 48'	+18° 47'	E.
	4487		552	0.861	262° 31'	188° 49'	270° 36'	+17° 44'	F.
	4488		552	0.857	262° 30'	185° 37'	267° 24'	+17° 34'	c.
	4489		552	0.865	263° 15'	185° 30'	267° 17'	+18° 29'	d.
	4490		552	0.848	262° 12'	184° 56'	266° 43'	+19° 20'	e.
	4491		552	0.840	263° 29'	183° 37'	265° 24'	+18° 54'	f.
	4492		553	0.372	71° 30'	104° 54'	186° 41'	-4° 20'	G.
	4493		553	0.375	72° 56'	103° 7'	184° 54'	-3° 30'	H.
	4494		553	0.422	73° 14'	101° 29'	183° 16'	-5° 49'	g.
	4495		553	0.431	74° 31'	99° 20'	181° 7'	-6° 15'	h.
	4496		533	0.475	91° 44'	98° 35'	180° 22'	-12° 5'	m.
	4497		554	0.982	45° 32'	42° 44'	124° 31'	+16° 42'	M.
	4498		554	0.984	45° 22'	43° 28'	125° 15'	+17° 47'	N.
	4499		554	0.975	44° 19'	40° 36'	122° 23'	+17° 31'	n.
	4500		554	0.975	46° 4'	44° 19'	126° 6'	+18° 36'	o.
	4501		551	0.970	256° 37'	204° 12'	285° 32'	+13° 50'	A.
	4502		551	0.956	257° 48'	207° 0'	288° 20'	+13° 9'	B.
	4503		551	0.956	259° 17'	205° 54'	287° 14'	+14° 55'	a.
	4504		551	0.947	260° 30'	207° 13'	288° 33'	+15° 42'	b.
	4505		552	0.897	262° 2'	189° 11'	270° 31'	+18° 42'	C.
	4506		552	0.886	263° 57'	189° 25'	270° 45'	+17° 25'	D.
	4507		552	0.890	263° 25'	187° 17'	268° 37'	+18° 48'	E.
	4508		552	0.863	262° 25'	189° 3'	270° 23'	+17° 48'	F.
	4509		552	0.859	262° 16'	185° 48'	267° 8'	+17° 31'	c.
	4510		552	0.867	263° 7'	186° 1'	267° 21'	+18° 35'	d.
	4511		552	0.850	262° 10'	185° 13'	266° 23'	+19° 15'	e.
	4512		552	0.842	263° 38'	184° 2'	265° 22'	+18° 50'	f.
	4513		553	0.370	71° 34'	105° 9'	186° 29'	-4° 22'	G.
	4514		553	0.374	73° 5'	103° 32'	184° 52'	-3° 38'	H.
	4515		553	0.421	73° 36'	101° 51'	183° 11'	-5° 50'	g.
	4516		553	0.428	74° 27'	99° 51'	181° 11'	-6° 11'	h.
	4517		553	0.472	91° 12'	98° 59'	180° 19'	-12° 10'	m.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Apr. 8.	4518	97.506	554	0.980	45° 38'	43° 6'	124° 26'	+16° 44'	M.
	4519		554	0.982	45 19	43 46	125 6	+17 41	N.
	4520		554	0.974	44 27	40 55	122 15	+17 33	n.
	4521		554	0.973	46 25	44 35	125 55	+18 39	o.
9.	4522	98.682	552	0.978	257 16	202 50	267 29	+17 31	A ¹ .
	4523		552	0.972	257 44	200 35	265 14	+18 29	A ² .
	4524		552	0.971	259 18	205 46	270 25	+19 16	A ³ .
	4525		552	0.971	258 39	204 47	269 26	+17 59	a.
	4526		552	0.965	257 37	201 9	265 48	+18 31	b.
	4527		552	0.968	258 17	201 49	266 28	+18 0	c.
	4528		552	0.959	260 22	200 31	265 10	+17 22	d.
	4529		552	0.953	260 7	201 26	266 5	+19 14	e.
	4530		553	0.117	104 1	119 6	183 45	- 2 4	B.
	4531		553	0.123	105 56	115 58	180 37	- 4 21	B ¹ .
	4532		553	0.127	103 23	120 37	185 16	- 5 28	B ² .
	4533		553	0.192	94 33	116 14	180 53	- 6 35	f.
	4534		553	0.195	95 36	114 29	179 8	- 3 10	g.
	4535		553	0.199	93 53	119 17	183 56	- 2 10	h.
	4536		553	0.295	115 58	116 58	181 37	-13 58	i.
	4537		553	0.283	116 59	115 30	180 9	-12 31	k.
	4538		554	0.883	44 57	58 47	123 26	+15 27	D.
	4539		554	0.884	44 51	58 6	122 45	+17 27	E.
	4540		554	0.896	45 48	60 14	124 53	+16 58	F.
	4541		554	0.884	47 13	60 34	125 13	+17 11	G.
	4542		554	0.902	46 37	60 51	125 30	+17 31	x ¹ .
	4543		554	0.911	45 9	60 11	124 50	+18 5	x ² .
	4544		554	0.921	47 28	62 17	126 56	+18 36	x ³ .
	4545	98.692	552	0.979	257 28	203 4	267 35	+17 28	A ¹ .
	4546		552	0.972	257 53	200 39	265 10	+18 28	A ² .
	4547		552	0.972	259 14	206 7	270 38	+19 21	A ³ .
	4548		552	0.973	258 44	204 59	269 30	+17 58	a.
	4549		552	0.966	257 25	201 26	265 57	+18 30	b.
	4550		552	0.968	258 26	202 9	266 40	+17 55	c.
	4551		552	0.959	260 52	200 34	265 5	+17 25	d.
	4552		552	0.955	260 18	201 40	266 11	+19 15	e.
	4553		553	0.115	104 8	119 24	183 55	- 2 10	B.
	4554		553	0.120	106 4	116 10	180 41	- 4 19	B ¹ .
	4555		553	0.128	103 37	121 5	185 36	- 5 34	B ² .
	4556		553	0.190	94 27	116 38	181 9	- 6 31	f.
	4557		553	0.193	95 50	114 24	178 55	- 3 14	g.
	4558		553	0.200	93 59	119 26	183 57	- 2 11	h.
	4559		553	0.292	116 7	117 13	181 44	-13 50	i.
	4560		553	0.281	117 2	115 46	180 17	-12 36	k.
	4561		554	0.881	44 47	59 3	123 34	+15 30	D.
	4562		554	0.880	44 45	58 10	122 41	+17 29	E.
	4563		554	0.895	45 58	60 30	125 1	+17 14	F.
	4564		554	0.882	47 6	60 41	125 12	+17 22	G.
	4565		554	0.901	46 22	61 5	125 36	+17 35	x ¹ .
	4566		554	0.911	44 57	60 23	124 54	+18 9	x ² .
	4567		554	0.919	47 26	62 32	127 3	+18 43	x ³ .
11.	4568	100.428	553	0.344	230 31	145 3	184 46	- 3 16	A.
	4569		553	0.342	231 28	144 5	183 58	- 2 15	B.
	4570		553	0.287	222 27	141 16	181 9	- 4 21	C.
	4571		553	0.289	222 54	141 11	181 4	- 5 4	a.
	4572		553	0.308	198 46	140 0	179 53	-12 44	b.
	4573		554	0.628	32 17	78 35	118 28	+16 36	D.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Apr. 11.	4574	100.428	554	0.634	33 25	78 28	118 21	+18 29	E.
	4575		554	0.644	35 14	77 31	117 24	+17 31	F.
	4576		554	0.669	38 14	83 38	123 31	+18 29	G.
	4577		554	0.702	40 49	82 41	122 34	+16 2	H.
	4578		554	0.695	36 51	75 32	115 25	+18 58	c.
	4579		554	0.721	37 32	76 19	116 12	+18 33	d.
	4580		554	0.724	40 44	77 7	117 0	+17 41	e.
	4581		554	0.711	41 16	77 56	117 49	+17 36	f.
	4582		554	0.732	41 23	74 34	114 27	+17 45	g.
	4583	100.495	553	0.347	230 24	145 43	184 39	- 3 15	A.
	4584		553	0.346	231 49	144 37	183 33	- 2 21	B.
	4585		553	0.290	222 46	141 55	180 51	- 4 25	C.
	4586		553	0.292	223 11	141 28	180 24	- 5 0	a.
	4587		553	0.310	198 40	140 28	179 24	-12 41	b.
	4588		554	0.626	32 19	78 58	117 54	+16 41	D.
	4589		554	0.632	33 22	78 46	117 42	+18 25	E.
	4590		554	0.641	35 40	78 5	117 1	+17 30	F.
	4591		554	0.665	38 31	83 56	122 52	+18 31	G.
	4592		554	0.700	40 22	83 4	122 0	+15 54	H.
	4593		554	0.692	37 0	75 49	114 45	+18 57	c.
	4594		554	0.718	37 49	76 39	115 35	+18 30	d.
	4595		554	0.720	40 35	77 24	116 20	+17 36	e.
	4596		554	0.708	41 19	78 19	117 15	+17 40	f.
12.	4597		554	0.729	41 28	74 50	113 46	+17 49	g.
	4598	101.464	553	0.533	236 22	154 6	179 18	- 2 37	A. ^o .
	4599		553	0.530	237 38	157 19	182 31	- 3 44	B. ^o .
	4600		553	0.481	232 39	158 12	183 24	- 6 18	C. ^o .
	4601		553	0.477	233 6	156 42	181 54	- 5 7	a. ^o .
	4602		553	0.465	218 24	153 55	179 7	-12 59	b. ^o .
	4603		554	0.495	24 7	91 4	116 16	+17 23	M.
	4604		554	0.492	24 58	97 16	122 28	+18 9	N.
	4605		554	0.501	33 36	97 59	123 11	+18 55	O.
	4606		554	0.533	31 27	89 7	114 19	+15 44	m.
	4607		554	0.528	29 9	89 53	115 5	+17 13	n.
	4608		554	0.540	33 12	87 47	112 59	+17 47	o.
13.	4609	102.499	553	0.722	234 19	170 46	181 17	- 2 14	a.
	4610		553	0.719	235 41	169 1	179 32	- 4 9	b.
	4611		553	0.666	232 46	171 33	182 4	- 5 58	c.
	4612		553	0.662	232 49	172 43	183 14	- 3 32	d.
	4613		554	0.406	355 32	111 57	122 28	+17 25	A.
	4614		554	0.402	357 51	103 36	114 7	+17 44	B.
	4615		554	0.396	359 14	102 8	112 39	+18 19	C.
	4616		554	0.420	0 23	113 17	123 48	+15 31	D.
	4617		554	0.417	1 30	102 27	112 58	+18 32	e.
	4618		554	0.435	8 57	103 40	114 11	+17 6	f.
	4619		554	0.431	10 41	106 34	117 5	+18 15	g.
	4620		554	0.446	10 5	107 34	118 5	+18 22	h.
14.	4621	103.543	553	0.864	234 11	184 25	180 7	- 4 7	M.
	4622		553	0.831	235 28	188 54	184 36	- 2 51	N.
	4623		554	0.376	317 9	128 7	123 49	+18 37	O.
15.	4624	104.493	553	0.950	234 28	198 20	180 34	- 4 19	A.
	4625		553	0.926	232 39	203 3	185 17	- 3 2	B.
	4626		554	0.454	291 27	141 40	123 54	+18 35	C.
	4627		555	0.642	68 12	92 29	74 43	- 6 24	M.
	4628		555	0.654	69 44	92 37	74 51	- 6 38	N.
	4629		555	0.655	71 12	93 56	76 10	- 8 4	O.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Apr. 15.	4630	104.493	555	0.661	72° 51'	93° 59'	76° 13'	— 8° 21'	m.
	4631		556	0.922	49 47	67 14	49 28	+ 9 34	n.
	4632		556	0.917	50 8	69 3	51 17	+10 14	o.
18.	4633	107.482	554a	0.976	253 21	220 39	160 29	+ 8 27	G.
	4634		556a	0.805	66 24	83 32	23 22	+ 4 39	A.
	4635		556a	0.817	67 39	83 7	22 57	+ 4 41	B.
	4636		556a	0.844	68 11	79 21	19 11	— 1 10	C.
	4637		556a	0.852	69 56	78 43	18 33	— 0 11	D.
	4638		556b	0.840	44 30	77 17	17 7	+21 38	a.
	4639		556b	0.855	44 55	76 19	16 9	+21 21	b.
.9.	4640	108.451	556a	0.642	64 35	96 54	22 59	+ 1 4	M.
	4641		556a	0.700	66 58	92 13	18 18	— 0 2	N.
	4642	108.484	556a	0.640	64 28	97 18	22 55	+ 1 7	M.
	4643		556a	0.697	67 10	92 29	18 6	+ 0 5	N.
20.	4644	109.444	556a	0.464	66 37	110 31	22 31	+ 2 16	A.
	4645		556a	0.471	67 44	109 54	21 54	+ 1 53	B.
	4646		556a	0.503	69 9	105 25	17 25	— 0 2	a.
	4647		556a	0.511	69 27	105 23	17 23	+ 0 14	b.
	4648		556c	0.862	61 25	77 54	349 54	+ 8 19	C.
	4649		556d	0.950	44 38	56 12	328 12	+26 33	D.
21.	4650	110.610	556a	0.243	62 26	128 0	23 28	+ 2 28	A ⁰ .
	4651		556a	0.245	62 45	126 41	22 9	+ 2 0	B ⁰ .
	4652		556a	0.306	66 34	122 36	18 4	+ 0 6	a ⁰ .
	4653		556a	0.308	66 12	122 8	17 36	+ 0 13	b ⁰ .
	4654		556c	0.724	57 54	94 40	350 8	+ 7 28	C.
	4655		556d	0.814	39 4	73 58	329 24	+25 35	D.
22.	4656	111.465	556a	0.056	70 49	136 41	20 1	+ 1 34	M.
	4657		556a	0.062	70 58	136 27	19 47	+ 2 7	N.
	4658	111.515	556a	0.055	71 14	137 35	20 12	+ 1 39	M.
	4659		556a	0.060	71 37	137 3	19 40	+ 2 6	N.
23.	4660	112.446	556a	0.208	245 13	151 19	20 44	+ 0 14	A.
	4661	112.469	556a	0.211	245 52	151 48	20 53	+ 0 17	A.
25.	4662	114.540	556a	0.594	238 47	179 32	19 15	— 0 12	A ⁰ .
26.	4663	115.639	No spots.						
	4664	115.654							
29.	4665	118.521							
	4666	118.549							
May 3.	4667	122.545	557	0.340	240 31	169 20	255 30	— 3 28	M.
	4668		557	0.339	239 54	168 21	254 31	— 2 38	M ¹ .
	4669		557	0.328	241 3	167 43	253 53	— 3 54	m.
	4670		557	0.314	234 38	164 36	250 46	— 4 22	n.
	4671		557	0.297	232 16	164 11	250 21	— 4 16	o.
	4672		557	0.285	230 27	163 16	249 26	— 5 44	p.
	4673		557a	0.696	73 22	105 4	191 14	— 6 37	A.
	4674		558	0.982	54 27	69 3	155 13	+13 13	B.
	4675		558	0.980	55 2	67 12	153 22	+12 54	B ¹ .
	4676	122.622	557	0.344	241 7	170 11	255 16	— 3 32	M.
	4677		557	0.341	240 13	168 47	253 52	— 2 40	M ¹ .
	4678		557	0.333	240 58	168 22	253 27	— 3 49	m.
	4679		557	0.316	235 0	166 10	251 15	— 4 30	n.
	4680		557	0.301	232 42	165 3	250 8	— 4 19	o.
	4681		557	0.287	230 29	163 47	248 52	— 5 40	p.
	4682		557a	0.696	73 12	105 36	190 41	— 6 38	A.
	4683		558	0.979	55 1	70 11	155 16	+13 10	B.
	4684		558	0.977	55 34	67 33	152 38	+13 1	B ¹ .
5.	4685	124.659	557	0.720	241 42	198 22	254 33	— 4 12	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 5.	4686	124.659	557	0.718	240° 59'	199° 8'	255° 19'	— 4° 2'	B.
	4687		557	0.715	239 16	194 17	250 28	— 3 28	C.
	4688		557	0.670	240 12	195 26	251 37	— 2 19	a.
	4689		557	0.654	239 24	194 29	250 40	— 2 57	b.
	4690		557	0.645	238 53	192 54	249 5	— 3 11	c.
	4691		558	0.448	42 22	100 20	156 31	+12 44	D.
	4692		558	0.452	42 37	99 11	155 22	+12 42	E.
	4693		558	0.470	43 19	97 40	153 51	+13 19	d.
	4694		558	0.492	44 24	93 31	149 42	+14 2	e.
	4695		558	0.495	44 46	96 6	152 17	+11 57	f.
	4696		559	0.734	52 5	74 17	130 28	+14 22	G.
	4697		559	0.741	52 33	73 43	129 54	+14 17	F.
6.	4698	125.484	557	0.870	241 54	211 25	255 54	— 4 27	P.
	4699		557	0.864	242 13	209 48	254 17	— 3 51	p.
	4700		558	0.317	26 42	112 37	157 6	+12 42	Q.
	4701		558	0.324	28 19	110 51	155 20	+11 16	R.
	4702		558	0.339	31 18	108 53	153 22	+12 19	q.
	4703		558	0.362	34 28	110 7	154 36	+13 36	r.
	4704		559	0.599	47 2	85 11	129 40	+14 59	S.
	4705		559	0.610	48 11	85 40	130 9	+15 2	s.
	4706	125.530	557	0.873	242 3	211 58	255 48	— 4 30	P.
	4707		557	0.866	242 54	210 34	254 24	— 3 46	p.
	4708		558	0.315	27 19	113 5	156 55	+12 44	Q.
	4709		558	0.321	28 11	111 44	155 34	+11 22	R.
	4710		558	0.336	30 47	109 41	153 31	+12 29	q.
	4711		558	0.360	34 29	111 10	155 0	+13 37	r.
	4712		559	0.596	47 20	85 52	129 42	+15 2	S.
	4713		559	0.608	48 10	86 35	130 25	+15 0	s.
7.	4714	126.480	557	0.957	241 24	226 6	256 28	— 3 27	A.
	4715		558	0.207	330 29	123 39	154 1	+12 22	B.
	4716		558	0.211	342 38	122 15	152 37	+13 4	C.
	4717		558	0.219	354 7	123 20	153 42	+10 58	D.
	4718		558	0.235	329 52	118 54	149 16	+12 24	a.
	4719		558	0.223	338 40	120 32	150 55	+12 29	b.
	4720		558	0.241	0 14	118 7	148 29	+11 33	c.
	4721		559	0.880	46 46	98 35	128 57	+14 43	M.
	4722		559	0.894	45 3	99 35	129 57	+15 26	N.
	4723		559	0.911	43 18	100 59	131 21	+15 55	n.
10.	4724	129.638	558	0.672	277 22	195 18	180 52	+12 7	A.
	4725		558	0.685	276 31	196 37	182 11	+12 19	B.
	4726		558	0.698	275 13	193 49	179 23	+11 12	a.
	4727		558	0.712	277 54	194 21	179 55	+13 54	b.
	4728		560	0.422	20 7	139 47	125 21	+21 31	C.
12.	4729	131.530	560	0.364	308 40	170 29	129 12	+20 24	M.
	4730		560	0.375	307 38	169 11	127 54	+21 31	N.
	4731		560	0.382	308 12	170 47	129 30	+19 26	O.
	4732		561	0.870	82 19	101 26	60 9	— 7 48	A.
	4733		561	0.869	81 15	100 54	59 37	— 6 20	B.
	4734		561	0.883	82 24	99 32	58 15	— 8 3	C.
	4735		561	0.877	83 33	97 42	56 25	— 8 8	a.
	4736		561	0.892	80 30	95 4	53 47	— 6 27	b.
	4737		561	0.897	79 26	99 37	58 20	— 7 53	c.
13.	4738	132.511	560	0.505	287 28	184 32	129 21	+17 28	A.
	4739		561	0.701	81 9	116 2	60 51	— 7 14	B.
	4740		561	0.717	81 26	115 46	60 35	— 6 33	b.
	4741		561	0.719	82 8	111 31	56 20	— 7 51	C.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 13.	4742	132.511	561	0.744	82° 34'	112° 55'	57° 44'	— 7° 23'	D.
	4743		561	0.763	81 40	113 14	58 3	— 8 38	e.
	4744		561	0.751	83 57	111 19	56 8	— 6 39	d.
	4745		561	0.784	83 34	110 23	55 12	— 6 1	e.
14.	4746	133.536	560	0.709	282 31	200 32	130 48	+17 24	M.
	4747		560	0.692	281 22	198 51	129 7	+17 23	N.
	4748		560	0.733	280 53	201 17	131 33	+16 39	m.
	4749		560	0.745	278 57	198 34	128 50	+15 13	n.
	4750		561	0.497	91 12	131 15	61 31	— 6 26	A.
	4751		561	0.502	91 19	125 1	55 17	— 6 30	B.
	4752		561	0.513	90 54	125 46	56 2	— 7 38	C.
	4753		561	0.550	91 33	130 41	60 57	— 6 12	D.
	4754		561	0.541	89 5	124 37	54 53	— 7 40	E.
	4755		561	0.533	89 10	132 3	62 19	— 7 41	a.
	4756		561	0.570	88 12	129 56	60 12	— 8 9	b.
	4757		561	0.571	87 29	127 22	57 38	— 7 57	c.
	4758		561	0.585	86 44	128 10	58 26	— 7 38	d.
	4759		561	0.587	87 17	128 14	58 30	— 8 14	e.
15.	4760	134.482	560	0.800	271 15	212 13	129 4	+17 28	A.
	4761		560	0.802	272 12	214 35	131 26	+17 20	B.
	4762		560	0.763	286 48	213 28	130 19	+18 53	C.
	4763		560	0.767	287 26	210 20	127 11	+16 37	a.
	4764		560	0.782	286 31	215 46	132 37	+15 48	b.
	4765		561	0.314	94 11	143 44	60 35	— 6 22	D.
	4766		561	0.321	94 54	145 2	61 53	— 6 46	E.
	4767		561	0.316	93 29	146 8	62 59	— 7 45	F.
	4768		561	0.320	95 59	140 38	57 29	— 7 58	d.
	4769		561	0.333	96 17	137 20	54 11	— 8 35	e.
	4770		561	0.339	92 31	138 32	55 23	— 6 18	f.
	4771		561	0.401	91 10	142 41	59 32	— 6 14	G.
	4772		561	0.387	93 0	141 52	58 43	— 7 33	g.
	4773		561	0.410	94 46	143 18	60 9	— 7 50	H.
	4774		561	0.412	93 18	139 1	55 52	— 7 44	h.
	4775		561	0.417	92 54	141 15	58 6	— 6 30	K.
	4776		561	0.405	94 26	137 33	54 24	— 6 22	k.
	4777	134.490	560	0.801	271 28	212 18	129 2	+17 30	A.
	4778		560	0.804	272 24	214 36	131 20	+17 25	B.
	4779		560	0.765	287 13	213 34	130 18	+19 4	C.
	4780		560	0.769	287 54	210 16	127 0	+16 44	a.
	4781		560	0.783	286 50	216 0	132 44	+15 43	b.
	4782		561	0.312	94 42	143 55	60 39	— 6 29	D.
	4783		561	0.319	94 51	144 58	61 42	— 6 47	E.
	4784		561	0.315	93 26	146 24	63 8	— 7 48	F.
	4785		561	0.319	96 4	140 42	57 26	— 8 3	d.
	4786		561	0.332	96 28	137 26	54 10	— 8 31	e.
	4787		561	0.336	92 15	138 45	55 29	— 6 17	f.
	4788		561	0.400	91 1	142 52	59 36	— 6 10	G.
	4789		561	0.385	93 24	141 56	58 40	— 7 25	g.
	4790		561	0.408	95 14	143 22	60 6	— 7 54	H.
	4791		561	0.410	93 2	139 16	56 0	— 7 42	h.
	4792		561	0.416	92 55	140 45	57 59	— 6 26	K.
	4793		561	0.404	94 28	137 48	54 32	— 6 17	k.
16.	4794	135.487	560	0.942	274 26	227 39	130 15	+17 24	M.
	4795		560	0.938	273 8	223 47	126 23	+16 30	N.
	4796		560	0.910	276 59	228 28	131 4	+18 21	m.
	4797		560	0.915	277 41	226 3	128 39	+17 36	n.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 16.	4798	135.487	561	0.199	153 17	159 32	62 8	- 6 15	P.
	4799		561	0.202	154 6	156 49	59 25	- 6 46	Q.
	4800		561	0.204	155 52	155 10	57 46	- 8 34	R.
	4801		561	0.211	140 53	153 14	55 50	- 8 53	S.
	4802		561	0.223	138 39	155 35	58 11	- 8 19	p.
	4803		561	0.240	129 46	152 58	55 34	- 7 47	q.
	4804		561	0.244	126 16	151 46	54 22	- 7 13	r.
	4805		561	0.251	122 24	159 22	61 58	- 6 48	s.
	4806		561	0.239	120 26	158 23	60 59	- 7 0	T.
	4807		561	0.265	118 29	157 23	59 59	- 8 25	T ¹ .
	4808		561	0.258	120 50	155 54	58 30	- 6 27	t.
	4809		561	0.264	117 33	155 30	58 6	- 6 14	t ¹ .
	4810		562	0.382	37 46	144 29	47 5	+15 23	A.
	4811		562	0.389	39 24	141 36	44 12	+15 16	B.
	4812		562	0.412	40 25	140 31	43 7	+17 48	a.
	4813		562*	0.434	41 0	139 46	42 24	+16 54	b.
	4814	135.523	560	0.944	273 54	228 28	130 33	+17 22	M.
	4815		560	0.939	273 41	224 10	126 15	+16 36	N.
	4816		560	0.908	277 4	228 47	130 52	+18 18	m.
	4817		560	0.916	276 38	226 35	128 40	+17 35	n.
	4818		561	0.196	154 19	160 2	62 7	- 6 14	P.
	4819		561	0.199	154 42	157 55	60 0	- 6 43	Q.
	4820		561	0.200	157 3	155 35	57 40	- 8 32	R.
	4821		561	0.208	141 12	153 39	55 44	- 8 50	S.
	4822		561	0.219	139 6	156 12	58 17	- 8 17	p.
	4823		561	0.236	128 44	153 36	55 41	- 7 45	q.
	4824		561	0.241	125 28	152 15	54 20	- 7 12	r.
	4825		561	0.247	123 1	159 57	62 2	- 6 50	s.
	4826		561	0.238	119 38	158 50	60 55	- 7 2	T.
	4827		561	0.262	117 25	157 45	59 50	- 8 28	T ¹ .
	4828		561	0.255	121 44	156 22	58 27	- 6 25	t.
	4829		561	0.261	117 20	156 5	58 10	- 6 16	t ¹ .
	4830		562	0.380	36 44	145 5	47 10	+15 25	A.
	4831		562	0.385	39 29	142 15	44 20	+15 17	B.
	4832		562	0.410	40 27	141 9	43 14	+17 52	a.
	4833		562	0.431	41 58	140 20	42 25	+16 55	b.
17.	4834	136.507	560	0.995	267 47	240 14	128 21	+17 36	N.
	4835		561	0.172	174 33	172 8	60 15	- 7 28	A.
	4836		561	0.176	175 18	175 23	63 30	- 6 46	B.
	4837		561	0.181	183 46	169 44	57 51	- 6 28	C.
	4838		561	0.194	177 12	171 52	59 59	- 6 58	D.
	4839		561	0.195	179 19	168 50	56 57	- 7 11	a.
	4840		561	0.202	184 52	170 8	58 15	- 8 23	b.
	4841		561	0.224	185 45	169 57	58 4	- 7 33	c.
	4842		561	0.219	191 25	173 18	61 25	- 7 36	d.
	4843		561	0.238	188 13	173 11	61 18	- 8 14	F.
	4844		561	0.224	195 9	168 41	56 48	- 8 57	f.
	4845		561	0.241	195 6	169 14	57 21	- 7 7	G.
	4846		561	0.237	196 58	170 49	58 56	- 7 16	g.
	4847		561	0.245	194 54	168 38	56 45	- 6 46	H.
	4848		561	0.243	197 39	167 49	55 56	- 8 4	h.
	4849		562	0.273	358 2	158 9	46 16	+15 14	K.
	4850		562	0.278	359 27	159 12	47 19	+16 1	k.
	4851		562	0.301	7 11	157 33	45 40	+16 50	O.
	4852		562	0.312	7 48	155 46	43 53	+17 27	o.
	4853		562	0.324	8 39	154 49	42 56	+17 51	P.

* Group No. 562 was visible on the 15th, but partially hidden by the wire of the telescope, hence positions not determinable.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 17.	4854	136·507	562	0·336	11 16	154 51	42 58	+17 21	Q.
	4855		562	0·325	10 14	156 15	44 22	+16 56	p.
	4856	136·520	562	0·326	12 20	157 4	45 11	+15 23	q.
	4857		560	0·996	267 28	240 31	128 29	+17 29	N.
	4858		561	0·173	175 2	172 14	60 12	- 7 34	A.
	4859		561	0·176	175 47	175 27	63 25	- 6 50	B.
	4860		561	0·180	184 19	169 52	57 50	- 6 29	C.
	4861		561	0·196	177 0	171 10	59 8	- 6 55	D.
	4862		561	0·197	178 53	168 48	56 46	- 7 10	a.
	4863		561	0·203	184 40	170 19	58 17	- 8 28	b.
	4864		561	0·225	185 36	170 19	58 17	- 7 39	c.
	4865		561	0·221	191 12	173 43	61 41	- 7 28	d.
	4866		561	0·240	188 31	173 50	61 48	- 8 10	F.
	4867		561	0·223	195 42	168 8	56 6	- 8 59	f.
	4868		561	0·240	195 50	169 33	57 31	- 7 8	G.
	4869		561	0·236	197 4	170 39	58 37	- 7 17	g.
	4870		561	0·246	194 59	168 42	56 40	- 6 44	H.
	4871		561	0·244	198 14	167 9	55 7	- 8 11	h.
	4872		562	0·271	358 31	158 29	46 27	+15 17	K.
	4873		562	0·275	359 46	159 26	47 24	+15 54	k.
	4874		562	0·302	6 53	157 21	45 19	+16 44	O.
	4875		562	0·310	6 49	155 17	43 15	+17 25	o.
	4876		562	0·322	8 31	154 18	42 16	+17 55	P.
	4877		562	0·335	11 45	154 32	42 30	+17 20	Q.
	4878		562	0·326	10 54	156 43	44 41	+16 51	p.
	4879		562	0·325	12 23	157 38	45 36	+15 25	q.
	18. 4880	137·479	561	0·320	304 47	186 14	60 35	- 7 55	A.
	4881		561	0·322	305 36	184 1	58 22	- 7 22	B.
	4882		561	0·334	307 20	188 1	62 22	- 6 21	C.
	4883		561	0·333	308 15	187 5	61 26	- 8 39	D.
	4884		561	0·298	309 2	185 27	59 48	- 7 28	E.
	4885		561	0·297	310 11	180 43	55 4	- 9 18	a.
	4886		561	0·282	312 20	186 33	60 54	- 7 33	b.
	4887		561	0·291	314 23	180 32	54 53	- 6 25	c.
	4888		561	0·294	315 25	181 5	55 26	- 6 8	d.
	4889		561	0·305	317 51	182 25	56 46	- 6 33	e.
	4890		561	0·303	324 37	183 43	58 4	- 5 14	f.
	4891		561	0·277	326 56	185 5	59 26	- 7 28	F.
	4892		561	0·279	324 5	181 28	55 49	- 8 46	G.
	4893		561	0·265	325 28	185 59	60 20	- 7 25	H.
	4894		561	0·266	328 39	186 49	61 10	- 7 34	g.
	4895		562	0·324	229 33	173 35	47 56	+14 49	M.
	4896		562	0·328	225 12	171 41	46 2	+15 51	N.
	4897		562	0·327	223 10	170 47	45 8	+15 12	O.
	4898		562	0·349	222 49	171 8	45 29	+16 28	m.
	4899		562	0·356	221 11	167 40	42 1	+14 34	n.
	4900		562	0·374	220 51	168 53	43 14	+18 33	o.
	4901		562	0·381	221 43	169 51	44 12	+17 48	M ^o .
	4902		562	0·394	219 37	171 58	46 19	+17 3	N ^o .
	4903		562	0·364	218 19	173 22	47 43	+16 57	O ^o .
	4904		562	0·402	218 29	169 17	43 38	+15 46	m ^l .
	4905		562	0·398	217 39	167 48	42 9	+14 22	n ^l .
	4906		562	0·417	217 16	168 15	42 36	+15 33	o ^l .
	4907		562	0·424	216 48	168 30	42 51	+15 35	S.
	4908		562	0·433	215 19	170 0	44 21	+15 19	s.
	4909		562	0·431	215 30	172 48	47 9	+14 58	R.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 18.	4910	137.494	561	0.321	304 10'	186 34'	60 41'	- 7 59	A.
	4911		561	0.324	305 53	184 14	58 21	- 7 16	B.
	4912		561	0.336	307 52	188 39	62 46	- 6 19	C.
	4913		561	0.334	308 15	187 49	61 56	- 8 30	D.
	4914		561	0.301	309 49	185 48	59 55	- 7 25	E.
	4915		561	0.300	310 24	181 15	55 22	- 9 32	a.
	4916		561	0.285	312 25	186 14	60 21	- 7 34	b.
	4917		561	0.294	314 50	180 32	54 39	- 6 28	c.
	4918		561	0.297	315 28	181 21	55 28	- 6 17	d.
	4919		561	0.307	318 11	182 11	56 18	- 6 32	e.
	4920		561	0.305	324 34	184 26	58 33	- 5 16	f.
	4921		561	0.280	326 3	185 7	59 14	- 7 24	F.
	4922		561	0.282	324 20	181 19	55 26	- 8 41	G.
	4923		561	0.266	325 37	186 20	60 27	- 7 31	H.
	4924		561	0.268	328 27	187 39	61 46	- 7 30	g.
	4925		562	0.326	229 15	173 49	47 56	+14 40	M.
	4926		562	0.330	225 44	172 27	46 34	+15 56	N.
	4927		562	0.331	223 36	171 23	45 30	+15 7	O.
	4928		562	0.353	223 25	170 53	45 0	+16 22	m.
	4929		562	0.360	221 12	168 31	42 38	+14 47	n.
	4930		562	0.375	220 54	169 15	43 22	+18 28	o.
	4931		562	0.382	221 14	170 0	44 7	+17 47	M ⁰ .
	4932		562	0.397	219 15	172 21	46 28	+17 10	N ⁰ .
	4933		562	0.368	218 27	173 18	47 25	+16 59	O ⁰ .
	4934		562	0.403	218 57	169 25	43 32	+15 50	m ¹ .
	4935		562	0.405	217 48	168 49	42 56	+14 16	n ¹ .
	4936		562	0.419	217 18	168 29	42 36	+15 32	o ¹ .
	4937		562	0.427	216 51	167 57	42 4	+15 33	S.
	4938		562	0.435	215 53	169 53	44 0	+15 26	s.
	4939		562	0.436	215 13	172 54	47 1	+14 52	R.
19.	4940	138.494	561	0.472	276 16	200 58	60 55	- 7 54	S.
	4941		561	0.464	278 57	202 13	62 10	- 8 56	P.
	4942		561	0.456	277 3	199 59	59 56	- 5 32	Q.
	4943		561	0.450	291 19	195 7	55 4	- 5 8	R.
	4944		561	0.417	288 31	203 34	63 31	- 8 6	s.
	4945		561	0.423	285 24	194 40	54 37	- 7 53	p.
	4946		561	0.395	289 22	200 47	60 44	- 6 24	q.
	4947		561	0.385	294 12	201 52	61 49	- 6 7	r.
	4948		562	0.551	231 47	188 53	48 50	+15 27	A.
	4949		562	0.536	231 44	186 31	46 28	+17 56	B.
	4950		562	0.530	230 33	184 34	44 31	+14 16	C.
	4951		562	0.519	228 6	185 35	45 32	+18 46	D.
	4952		562	0.511	229 18	183 18	43 15	+16 11	a.
	4953		562	0.499	227 7	186 38	46 35	+14 20	b.
	4954		562	0.494	228 39	182 49	42 46	+13 32	c.
	4955		562	0.495	227 40	182 14	42 11	+14 1	d.
	4956		562	0.486	227 16	184 40	44 37	+15 21	E.
	4957		562	0.482	227 55	185 28	45 25	+13 26	e.
	4958		563	0.961	58 28	85 57	305 57	+ 6 33	X.
	4959		563	0.965	60 30	88 12	308 12	+ 7 52	Y.
	4960		563	0.973	62 20	90 6	310 6	+ 8 28	x.
	4961		563	0.980	64 4	94 20	314 20	+ 9 39	y.
	4962	138.509	561	0.475	276 17	200 31	60 15	- 7 53	S.
	4963		561	0.466	278 41	202 43	62 27	- 9 2	P.
	4964		561	0.460	277 21	199 26	59 10	- 5 40	Q.
	4965		561	0.453	291 14	195 28	55 12	- 5 5	R.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 19.	4966	138.509	561	0.419	288° 59'	203° 22'	63° 6'	— 8° 7'	s.
	4967		561	0.427	285 30	194 45	54 29	— 7 33	p.
	4968		561	0.400	289 57	200 26	60 10	— 6 29	q.
	4969		561	0.387	294 33	201 38	61 22	— 6 16	r.
	4970		562	0.552	231 57	189 28	49 12	+15 22	A.
	4971		562	0.537	231 11	187 10	46 54	+18 2	B.
	4972		562	0.536	230 4	184 40	44 24	+14 20	C.
	4973		562	0.524	228 6	185 27	45 11	+18 41	D.
	4974		562	0.513	229 54	183 45	43 29	+16 16	a.
	4975		562	0.504	227 33	186 51	46 35	+14 16	b.
	4976		562	0.497	228 25	183 2	42 46	+13 35	c.
	4977		562	0.499	227 20	183 3	42 47	+13 56	d.
	4978		562	0.488	227 5	184 24	44 8	+15 20	E.
	4979		562	0.486	228 12	185 56	45 40	+13 18	e.
	4980		563	0.959	58 39	85 48	305 32	+ 6 32	X.
	4981		563	0.964	60 32	88 12	307 56	+ 8 7	Y.
	4982		563	0.972	62 50	90 1	309 45	+ 8 34	x.
	4983		563	0.980	64 25	94 44	314 28	+ 9 26	y.
20.	4984	139.480	561	0.712	237 37	213 54	59 52	— 7 3	A.
	4985		561	0.718	238 26	214 41	60 39	— 8 42	B.
	4986		561	0.754	238 29	213 1	58 59	— 5 23	C.
	4987		561	0.733	236 19	214 34	60 32	— 6 39	D.
	4988		561	0.788	236 18	213 16	59 14	— 8 18	a.
	4989		561	0.762	237 6	210 48	56 46	— 7 26	b.
	4990		561	0.769	235 45	208 13	54 11	— 6 11	c.
	4991		561	0.793	235 54	209 36	55 34	— 5 51	d.
	4992		562	0.564	274 19	200 5	46 3	+14 5	M.
	4993		562	0.570	277 49	203 56	49 54	+15 19	N.
	4994		562	0.624	280 33	202 20	48 18	+14 35	O.
	4995		562	0.655	282 23	199 54	45 52	+16 22	m.
	4996		562	0.682	282 29	202 59	48 57	+16 9	n.
	4997		563	0.830	58 45	104 5	310 3	+15 6	P.
	4998		563	0.862	59 40	102 36	308 34	+13 5	Q.
	4999		563	0.889	63 57	101 20	307 18	+14 50	R.
	5000		563	0.902	67 46	100 45	306 43	+13 49	p.
	5001		564	0.422	305 4	178 10	24 8	+18 25	S.
	5002		564	0.416	306 28	179 28	25 26	+19 14	s.
	5003		564	0.391	308 13	180 16	26 14	+18 36	s ¹ .
	5004	139.493	561	0.715	237 57	213 46	59 32	— 7 9	A.
	5005		561	0.721	238 40	214 37	60 23	— 8 40	B.
	5006		561	0.756	238 26	212 50	58 36	— 5 26	C.
	5007		561	0.736	236 43	214 34	60 20	— 6 40	D.
	5008		561	0.791	236 12	214 11	59 57	— 8 22	a.
	5009		561	0.765	237 27	210 30	56 16	— 7 25	b.
	5010		561	0.772	235 28	208 15	54 1	— 6 16	c.
	5011		561	0.795	235 29	209 33	55 19	— 5 54	d.
	5012		562	0.566	274 29	200 26	46 12	+14 2	M.
	5013		562	0.571	277 2	203 40	49 26	+15 22	N.
	5014		562	0.625	280 39	203 12	48 58	+14 26	O.
	5015		562	0.658	282 47	200 9	45 55	+16 24	m.
	5016		562	0.685	282 43	203 22	49 8	+16 10	n.
	5017		563	0.828	58 39	104 51	310 37	+15 5	P.
	5018		563	0.859	59 57	102 33	308 19	+13 5	Q.
	5019		563	0.887	63 51	101 20	307 6	+14 55	R.
	5020		563	0.900	67 57	101 2	306 48	+13 46	p.
	5021		564	0.425	305 18	178 47	24 33	+18 20	s.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 20.	5022	139.493	564	0.417	306° 11'	179° 34'	25° 20'	+19° 15'	s.
	5023		564	0.395	308 24	180 26	26 12	+18 46	s ¹ .
24.	5024	143.602	564	0.888	269 59	238 3	25 32	+19 26	m.
	5025		564	0.889	271 20	237 20	24 49	+17 32	n.
	5026		564	0.902	270 25	239 39	27 8	+18 50	o.
	5027	143.661	564	0.892	269 57	239 1	25 40	+19 33	m.
	5028		564	0.895	271 2	238 34	25 13	+17 42	n.
	5029		564	0.908	270 49	240 16	26 55	+18 54	o.
27.	5030	146.462	565	0.420	262 25	199 17	306 12	+ 7 9	A.
	5031		565	0.444	260 33	198 29	305 24	+ 6 26	B.
	5032		565	0.454	259 40	195 36	302 31	+ 8 40	C.
	5033		565	0.468	259 17	193 40	300 35	+ 8 12	a.
	5034		565	0.473	257 4	192 1	298 56	+ 9 31	b.
	5035		566	0.964	47 19	91 19	198 14	+21 25	S.
	5036		566	0.966	48 31	90 7	197 2	+22 38	s.
	5037	146.509	565	0.424	263 3	199 43	305 58	+ 7 12	A.
	5038		565	0.446	260 17	199 24	305 39	+ 6 31	B.
	5039		565	0.457	259 58	196 15	302 30	+ 8 34	C.
	5040		565	0.470	258 32	194 34	300 49	+ 8 11	a.
	5041		565	0.475	257 42	192 59	299 14	+ 9 42	b.
	5042		566	0.962	47 26	91 51	198 16	+21 20	S.
	5043		566	0.965	48 21	90 56	197 11	+22 27	s.
28.	5044	147.455	565	0.622	268 46	211 10	304 0	+ 8 36	P.
	5045		565	0.582	270 42	212 44	305 34	+ 7 42	Q.
	5046		565	0.571	266 52	210 32	303 22	+ 8 11	R.
	5047		566	0.872	53 45	106 19	199 9	+21 19	S.
	5048		566	0.884	54 34	105 57	198 47	+20 39	s.
	5049		567	0.512	281 52	203 48	296 38	+18 26	M.
	5050		567	0.521	283 6	206 14	299 4	+17 13	N.
	5051		567	0.565	283 32	208 2	300 52	+16 57	O.
	5052	147.496	565	0.625	267 13	211 57	304 12	+ 8 30	P.
	5053		565	0.584	270 9	213 13	305 28	+ 7 45	Q.
	5054		565	0.574	266 34	211 7	303 22	+ 8 12	R.
	5055		566	0.870	53 9	107 3	199 18	+21 20	S.
	5056		566	0.882	54 40	106 30	198 45	+20 44	s.
	5057		567	0.515	282 6	204 25	296 40	+18 37	M.
	5058		567	0.525	283 57	207 0	299 15	+17 16	N.
	5059		567	0.568	282 10	208 42	300 57	+17 4	O.
30.	5060	149.664	567	0.877	267 40	237 57	299 27	+18 22	B.
	5061		567	0.894	269 10	239 5	300 35	+17 16	b.
	5062		566	0.609	33 26	135 32	197 2	+21 54	D.
	5063		566	0.611	34 1	137 34	199 4	+20 39	d.
	5064		568	0.972	58 11	95 43	157 13	+ 8 53	A.
	5065		568	0.983	61 36	94 11	155 41	+ 7 39	a.
	5066		568	0.986	64 58	96 21	157 51	+ 5 27	a ¹ .
	5067		569	0.954	87 43	102 51	164 21	-18 20	C.
	5068		569	0.959	88 19	100 12	161 42	-19 4	c.
	5069		570	0.992	86 12	89 19	150 49	-16 46	E.
	5070		570	0.994	85 13	90 38	152 8	-17 31	e.
	5071	149.672	567	0.880	268 10	238 30	299 53	+18 25	B.
	5072		567	0.897	269 21	239 21	300 44	+17 22	b.
	5073		566	0.608	32 28	135 50	197 13	+22 6	D.
	5074		566	0.608	34 12	137 55	199 18	+20 44	d.
	5075		568	0.970	58 41	95 46	157 9	+ 8 46	A.
	5076		568	0.981	60 59	94 30	155 53	+ 7 35	a.
	5077		568	0.984	65 10	96 29	157 52	+ 5 22	a ¹ .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. May 30.	5078	149.672	569	0.952	87° 33'	103° 11'	164° 34'	-18° 15'	C.
	5079		569	0.955	88 15	100 40	162 3	-18 58	c.
	5080		570	0.990	86 10	89 31	150 54	-16 40	E.
	5081		570	0.989	85 9	91 2	152 25	-17 31	e.
June 4.	5082	154.464	566	0.641	302 55	213 50	207 15	+22 6	A.
	5083		566	0.645	302 31	214 56	208 21	+20 14	B.
	5084		568	0.287	32 26	170 50	164 15	+10 25	M.
	5085		568	0.291	32 16	169 19	162 44	+ 8 39	N.
	5086		568	0.314	35 36	170 20	163 45	+ 8 18	O.
	5087		568	0.308	34 20	155 43	149 8	+ 7 19	P.
	5088		568	0.312	45 29	156 44	150 9	+ 7 27	m.
	5089		568	0.315	45 47	158 47	152 12	+ 9 8	n.
	5090		568	0.324	35 54	164 28	157 53	+10 13	o.
	5091		568	0.338	53 33	166 48	160 13	+13 18	p.
	5092		568	0.310	50 33	163 8	156 33	+11 26	a.
	5093		568	0.392	49 1	154 32	147 57	+10 5	b.
	5094		568	0.384	56 58	158 17	151 42	+10 42	Q.
	5095		568	0.365	57 41	167 43	161 8	+11 6	Q ¹ .
	5096		568	0.366	36 31	165 47	159 12	+12 45	R.
	5097		568	0.402	36 17	159 22	152 47	+10 2	S.
	5098		568	0.385	59 56	159 42	153 7	+12 12	T.
	5099		568	0.424	58 27	154 26	147 51	+11 35	r.
	5100		568	0.436	54 22	153 58	147 23	+ 9 47	s.
	5101		568	0.421	52 56	153 34	146 59	+ 8 19	t.
	5102		568	0.419	57 9	154 18	147 43	+12 25	u.
	5103		568	0.433	58 15	155 19	148 44	+12 53	v.
	5104		569	0.224	168 48	178 20	171 45	-11 5	C.
	5105		569	0.236	164 46	176 29	169 54	-11 50	D.
	5106		569	0.237	157 58	169 22	162 47	-12 37	E.
	5107		569	0.254	159 3	172 4	165 29	-11 27	F.
	5108		569	0.258	155 18	174 43	168 8	-13 35	G.
	5109		569	0.263	153 42	168 21	161 46	-13 53	c.
	5110		570	0.333	128 12	165 30	158 55	-12 55	d.
	5111		570	0.336	126 27	164 31	157 56	-15 55	e.
	5112		570	0.371	119 21	158 19	151 44	-16 28	f.
	5113		570	0.385	119 16	157 28	150 53	-14 43	g.
	5114		570	0.360	122 54	155 13	148 38	-13 34	H.
	5115		570	0.370	125 43	156 54	150 19	-14 29	h.
	5116		570	0.394	116 45	157 39	151 4	-15 42	h ¹ .
	5117		570	0.398	115 53	158 37	152 2	-12 40	K.
	5118		570	0.408	116 11	156 21	149 46	-10 13	k ¹ .
	5119		570	0.410	117 15	155 36	149 1	-10 35	l.
	5120		571	0.594	51 2	142 51	136 16	+16 12	S.
	5121		571	0.596	52 8	137 27	130 52	+15 56	s.
	5122		571	0.635	52 28	140 28	133 53	+17 26	X.
	5123		571	0.642	54 9	142 5	135 30	+17 45	x.
	5124	154.520	566	0.644	303 31	214 17	206 54	+22 13	A.
	5125		566	0.649	302 44	215 28	208 5	+20 13	B.
	5126		568	0.285	32 10	171 23	164 0	+10 31	M.
	5127		568	0.288	31 54	169 54	162 31	+ 8 34	N.
	5128		568	0.312	35 55	170 41	163 18	+ 8 16	O.
	5129		568	0.305	34 8	156 24	149 1	+ 7 14	P.
	5130		568	0.308	45 50	157 29	150 6	+ 7 21	m.
	5131		568	0.310	45 41	159 33	152 10	+ 9 7	n.
	5132		568	0.321	36 3	164 37	157 14	+10 12	o.
	5133		568	0.335	53 25	166 59	149 36	+13 13	p.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 4.	5134	154.520	568	0.307	50° 17'	163° 29'	156° 6'	+11° 34'	a.
	5135		568	0.388	49 15	155 10	147 47	+10 1	b.
	5136		568	0.380	57 13	158 28	151 5	+10 50	Q.
	5137		568	0.362	57 35	168 21	160 58	+11 11	Q ¹ .
	5138		568	0.362	36 44	165 59	158 36	+12 44	R.
	5139		568	0.401	35 58	159 50	152 27	+10 6	S.
	5140		568	0.380	60 5	159 57	152 34	+12 6	T.
	5141		568	0.420	58 16	154 37	147 14	+11 40	r.
	5142		568	0.430	54 43	154 18	146 55	+ 9 51	s.
	5143		568	0.417	53 12	153 46	146 23	+ 8 28	t.
	5144		568	0.415	56 50	154 56	147 33	+12 34	u.
	5145		568	0.430	58 17	155 27	148 4	+13 1	v.
	5146		569	0.221	169 7	178 39	171 16	-11 16	C.
	5147		569	0.235	164 50	176 45	169 22	-11 54	D.
	5148		569	0.232	158 21	169 40	162 17	-12 28	E.
	5149		569	0.250	158 47	172 18	164 55	-11 22	F.
	5150		569	0.255	155 19	175 12	167 49	-13 31	G.
	5151		570	0.331	127 56	165 52	168 29	-13 3	d.
	5152		570	0.330	126 51	164 39	157 16	-16 7	e.
	5153		570	0.367	119 30	158 29	151 6	-16 24	f.
	5154		570	0.379	119 14	157 59	150 36	-14 41	g.
	5155		570	0.354	123 6	155 41	148 18	-13 36	H.
	5156		570	0.365	125 50	157 28	150 5	-14 34	h.
	5157		570	0.388	116 52	157 57	150 34	-15 40	h ¹ .
	5158		570	0.396	116 9	158 46	151 23	-12 43	K.
	5159		570	0.399	116 18	156 40	149 17	-10 19	k ¹ .
	5160		570	0.406	117 24	156 43	149 20	-10 41	l.
	5161		571	0.591	51 8	142 53	135 30	+16 18	S.
	5162		571	0.592	52 15	137 48	130 25	+16 4	s.
	5163		571	0.630	52 34	140 46	133 23	+17 25	X.
	5164		571	0.640	54 31	142 27	135 4	+17 41	x.
6.	5165	156.545	566	0.880	281 47	243 25	207 19	+21 47	M.
	5166		566	0.884	282 2	245 0	208 54	+20 31	N.
	5167		568	0.374	285 19	194 39	158 33	+ 9 4	A.
	5168		568	0.365	286 26	198 29	162 23	+10 46	B.
	5169		568	0.357	286 37	191 35	155 29	+11 13	C.
	5170		568	0.328	287 18	186 51	150 45	+11 43	D.
	5171		568	0.310	290 6	192 46	156 40	+10 26	a.
	5172		568	0.348	289 45	195 3	158 57	+ 9 28	b.
	5173		568	0.302	291 49	185 34	149 28	+12 27	c.
	5174		568	0.301	292 43	188 33	152 27	+12 4	d.
	5175		568	0.297	292 47	188 24	152 18	+11 46	E.
	5176		568	0.282	298 39	189 6	153 0	+11 10	F.
	5177		568	0.275	295 39	185 31	149 25	+ 9 10	G.
	5178		568	0.251	299 57	191 59	155 53	+11 33	H.
	5179		568	0.248	300 51	194 38	158 32	+10 2	e.
	5180		568	0.265	300 19	194 8	158 2	+11 54	f.
	5181		568	0.262	301 52	189 49	153 43	+11 52	g.
	5182		568	0.245	302 26	188 57	152 51	+10 18	h.
	5183		569	0.471	226 10	205 43	169 37	-13 57	X.
	5184		569	0.454	224 30	204 27	168 21	-12 3	x.
	5185		569	0.462	223 2	203 59	167 53	-11 18	Y.
	5186		569	0.450	221 43	205 53	169 47	-13 33	y.
	5187		570	0.310	200 39	192 6	156 0	-15 43	W.
	5188		570	0.272	194 38	190 9	154 3	-16 51	w.
	5189		570	0.220	189 26	184 48	148 42	-13 14	v.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 6.	5190	156.545	570	0.231	185° 53'	186° 29'	150° 23'	-14° 35'	v.
	5191		571	0.320	6 41	172 45	136 39	+17 20	P.
	5192		571	0.325	11 43	169 21	133 15	+17 2	Q.
	5193		541	0.331	7 4	170 48	134 42	+16 21	R.
	5194		571	0.351	8 58	166 32	130 26	+15 11	S.
	5195		571	0.361	8 19	165 34	129 28	+16 19	p.
	5196		571	0.345	17 39	164 11	128 5	+17 31	q.
	5197		571	0.347	19 55	165 29	129 23	+15 29	r.
	5198		571	0.363	22 58	164 12	128 6	+18 32	s.
	5199		572	0.750	94 31	137 11	101 5	-17 24	T.
	5200		572	0.746	95 6	138 54	102 48	-17 9	t ^l .
	5201		572	0.822	93 21	132 19	96 13	-18 20	t ^u .
	5202		572	0.829	92 13	131 52	95 46	-18 29	u.
7.	5203	157.521	566	0.963	281 49	258 47	208 50	+20 27	A.
	5204		566	0.965	280 14	258 46	208 49	+22 8	a.
	5205		568	0.522	275 0	207 11	157 14	+ 9 50	B.
	5206		568	0.517	277 17	196 17	146 20	+10 15	C.
	5207		568	0.519	276 48	194 4	144 7	+12 25	D.
	5208		568	0.505	281 54	199 31	149 34	+11 55	b.
	5209		568	0.487	279 11	198 45	148 48	+12 51	c.
	5210		568	0.491	282 13	206 1	156 4	+ 9 27	d.
	5211		568	0.413	278 28	195 53	145 56	+ 9 18	E.
	5212		568	0.426	279 12	205 6	155 9	+10 16	E ^l .
	5213		568	0.438	283 43	208 48	158 51	+11 44	F
	5214		568	0.457	281 37	207 20	157 23	+11 34	F ^l .
	5215		568	0.501	277 48	202 50	152 53	+11 42	e.
	5216		568	0.412	283 30	210 25	160 28	+11 44	f.
	5217		569	0.644	236 57	220 9	170 12	-13 51	G.
	5218		569	0.642	232 18	216 14	166 17	-10 20	G ^l .
	5219		569	0.636	234 11	215 48	165 51	-12 18	g.
	5220		569	0.631	231 27	216 36	166 39	-12 4	g ^l .
	5221		570	0.384	222 14	206 56	156 59	-16 3	H.
	5222		570	0.371	223 50	201 29	151 32	-15 21	h.
	5223		570	0.361	224 5	200 10	150 13	-15 39	h ^l .
	5224		571	0.274	328 9	179 33	129 36	+15 36	S.
	5225		571	0.281	331 46	182 4	132 7	+17 38	s.
	5226		571	0.282	336 3	184 56	134 59	+17 59	s ^l .
	5227		571	0.295	332 31	186 35	136 38	+16 35	T.
	5228		571	0.301	334 35	180 0	130 3	+15 7	t ^l .
	5229		571	0.305	345 45	185 22	135 25	+17 3	t ^u .
	5230		571	0.317	346 58	185 27	135 30	+16 45	t ^u .
	5231		541	0.328	349 34	184 41	134 44	+16 58	u.
	5232		572	0.584	104 30	150 42	100 55	-17 25	W.
	5233		572	0.579	103 54	152 24	102 27	-17 30	w.
	5234		572	0.632	101 58	147 15	97 18	-18 34	V.
	5235		572	0.628	99 58	145 17	95 20	-19 44	v.
	5236	157.540	566	0.966	282 56	258 21	208 8	+20 25	A.
	5237		566	0.968	280 26	259 5	208 52	+22 15	a.
	5238		568	0.525	274 0	207 48	157 35	+ 9 48	B.
	5239		568	0.520	277 38	196 46	146 33	+10 17	C.
	5240		568	0.524	276 9	195 8	144 55	+12 16	D.
	5241		568	0.508	282 48	199 52	149 39	+12 4	b.
	5242		568	0.489	278 44	199 56	148 43	+13 4	c.
	5243		568	0.493	282 39	206 14	156 1	+ 9 30	d.
	5244		568	0.416	279 49	195 27	145 14	+ 9 21	E.
	5245		568	0.429	278 39	205 27	155 14	+10 15	E ^l .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 7.	5246	157.540	568	0.441	284° 44'	208° 57'	158° 44'	+11° 50'	F.
	5247		568	0.460	281 40	207 39	157 26	+11 42	F ¹ .
	5248		568	0.505	277 36	203 56	153 43	+11 44	e.
	5249		568	0.417	283 49	210 42	160 29	+11 45	f.
	5250		569	0.650	237 58	220 48	170 35	-13 56	G.
	5251		569	0.645	232 33	216 36	166 23	-10 14	G ¹ .
	5252		569	0.640	234 55	216 52	166 39	-12 23	g.
	5253		569	0.633	231 9	217 1	166 48	-11 54	g ¹ .
	5254		570	0.385	222 33	206 22	156 9	-16 8	H.
	5255		570	0.373	224 41	201 54	151 41	-15 17	h.
	5256		570	0.362	223 6	200 48	150 35	-15 44	h ¹ .
	5257		571	0.275	328 28	180 9	129 56	+15 41	S.
	5258		571	0.282	331 25	182 40	132 27	+17 33	s.
	5259		571	0.281	337 56	184 20	134 7	+18 10	s ¹ .
	5260		571	0.294	331 48	186 26	136 13	+16 36	T.
	5261		571	0.299	333 13	180 55	130 42	+14 59	t.
	5262		571	0.306	344 13	185 35	135 18	+17 5	t ¹ .
	5263		571	0.318	345 15	186 8	135 55	+16 49	t ¹ .
	5264		571	0.330	349 18	185 4	134 51	+17 2	u.
	5265		572	0.580	105 43	150 19	100 6	-17 33	W.
	5266		572	0.575	103 17	152 46	102 33	-17 32	w.
	5267		572	0.627	102 47	147 24	97 11	-18 39	V.
	5268		572	0.622	99 7	146 1	95 48	-19 41	v.
	8. 5269	158.548	568	0.691	268 4	221 18	156 47	+10 44	A.
	5270		568	0.683	269 38	212 48	148 17	+ 9 18	B.
	5271		568	0.675	272 49	214 15	149 44	+10 18	C.
	5272		568	0.688	271 43	214 6	149 35	+10 46	D.
	5273		568	0.674	273 9	218 48	154 17	+11 47	E.
	5274		568	0.688	274 48	211 39	147 8	+11 4	F.
	5275		568	0.672	275 26	218 40	154 9	+12 32	a.
	5276		568	0.610	275 54	223 59	159 28	+10 27	b.
	5277		568	0.625	277 35	224 47	160 16	+12 57	c.
	5278		568	0.636	277 35	220 2	155 31	+12 34	d.
	5279		568	0.651	277 57	212 59	148 28	+11 34	e.
	5280		568	0.605	278 11	213 35	149 4	+10 50	f.
	5281		569	0.812	237 21	232 26	167 55	-13 25	G.
	5282		569	0.810	237 34	233 9	168 38	-11 45	G ¹ .
	5283		569	0.807	236 9	234 47	170 16	-12 17	g.
	5284		569	0.804	235 57	233 50	169 19	-12 59	g ¹ .
	5285		570	0.550	232 10	217 10	152 39	-16 17	H.
	5286		570	0.544	231 36	220 16	155 45	-15 49	h.
	5287		571	0.415	297 4	198 30	133 59	+17 55	M.
	5288		571	0.406	298 50	194 27	129 56	+16 36	N.
	5289		571	0.392	300 44	198 50	134 19	+18 29	O.
	5290		571	0.378	302 6	199 44	135 13	+14 39	m.
	5291		571	0.388	304 28	200 43	136 12	+15 42	n.
	5292		571	0.361	307 42	199 37	135 6	+16 21	o.
	5293		571	0.355	306 51	199 47	135 16	+17 51	P.
	5294		571	0.341	308 6	195 9	130 38	+17 45	p.
	5295		572	0.415	116 35	165 43	101 12	-17 35	Q.
	5296		572	0.417	117 53	166 45	102 14	-17 18	Q ¹ .
	5297		572	0.488	109 47	160 49	96 18	-19 54	q.
	5298		572	0.483	109 17	162 21	97 50	-18 42	q ¹ .
	5299	158.610	568	0.688	268 5	221 39	156 16	+10 40	A.
	5300		568	0.679	269 32	213 48	148 25	+ 9 23	B.
	5301		568	0.670	272 24	215 11	149 48	+10 15	C.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 8.	5302	158.610	568	0.685	272° 44'	225 17'	149° 54'	+10° 50'	D.
	5303		568	0.672	273 12	219 35	154 12	+11 49	E.
	5304		568	0.684	274 40	212 49	147 26	+11 8	F.
	5305		568	0.668	275 44	220 22	154 59	+12 35	a.
	5306		568	0.605	276 32	224 23	159 0	+10 29	b.
	5307		568	0.622	276 47	226 20	160 57	+12 52	c.
	5308		568	0.631	277 52	220 40	155 17	+12 31	d.
	5309		568	0.645	277 12	213 34	148 11	+11 37	e.
	5310		568	0.601	278 24	214 53	149 30	+10 54	f.
	5311		569	0.807	237 0	233 9	167 46	-13 26	G.
	5312		569	0.805	237 37	233 34	168 11	-11 40	G ¹ .
	5313		569	0.806	236 56	236 18	170 55	-12 17	g.
	5314		569	0.800	235 39	234 32	169 9	-13 4	g ¹ .
	5315		570	0.545	232 48	217 56	152 33	-16 16	H.
	5316		570	0.541	231 9	221 4	155 41	-15 41	h.
	5317		571	0.411	298 41	198 29	133 6	+17 50	M.
	5318		571	0.402	297 35	194 51	129 28	+16 31	N.
	5319		571	0.387	300 56	199 48	134 25	+18 22	O.
	5320		571	0.375	301 25	201 19	135 56	+14 33	m.
	5321		571	0.383	304 7	202 11	136 48	+15 44	n.
	5322		571	0.356	307 13	200 36	135 13	+16 20	o.
	5323		571	0.350	306 42	200 56	135 33	+17 46	P.
	5324		571	0.346	308 22	195 45	130 22	+17 46	p.
	5325		572	0.411	116 49	166 50	101 27	-17 42	Q.
	5326		572	0.415	118 22	167 49	102 26	-17 13	Q ¹ .
	5327		572	0.483	109 58	161 33	96 10	-18 0	q.
	5328		572	0.479	108 52	163 26	98 3	-18 37	q ¹ .
10.	5329	160.492	568	0.942	266 18	251 46	159 41	+11 33	M.
	5330		568	0.930	267 14	246 26	154 21	+12 57	N.
	5331		568	0.927	267 51	252 42	160 37	+12 40	O.
	5332		568	0.925	269 43	250 14	158 9	+10 28	P.
	5333		568	0.906	268 0	250 45	158 40	+11 40	m.
	5334		568	0.901	268 25	248 9	156 4	+12 53	n.
	5335		568	0.909	269 16	252 39	160 34	+12 23	o.
	5336		568	0.898	270 6	242 28	150 23	+11 5	p.
	5337		569	0.971	243 42	261 4	168 59	-13 4	X.
	5338		571	0.680	278 6	224 34	132 29	+16 42	G.
	5339		571	0.665	282 2	221 23	129 18	+15 5	G ¹ .
	5340		571	0.614	286 12	225 59	133 54	+14 47	g.
	5341		571	0.592	287 39	226 36	134 31	+18 17	g ¹ .
	5342		572	0.294	184 32	194 30	102 25	-17 11	Y.
	5343		572	0.299	185 44	193 37	101 32	-18 6	Y ⁰ .
	5344		572	0.308	186 50	189 32	97 27	-18 54	y ¹ .
	5345		572	0.299	170 38	190 33	98 28	-19 12	y ⁰ .
	5346		572	0.307	172 53	188 55	96 50	-18 52	z.
	5347		573	0.946	58 54	115 33	23 28	+16 43	W.
	5348	160.503	568	0.945	266 51	252 6	159 51	+11 36	M.
	5349		568	0.933	267 42	246 26	154 11	+12 50	N.
	5350		568	0.929	267 17	253 4	160 49	+12 46	O.
	5351		568	0.926	269 41	251 9	158 54	+10 27	P.
	5352		568	0.908	268 48	250 48	158 33	+11 42	m.
	5353		568	0.905	268 17	248 55	156 40	+12 50	n.
	5354		568	0.911	269 4	252 34	160 19	+12 18	o.
	5355		568	0.902	270 14	242 46	150 31	+11 10	p.
	5356		569	0.975	243 16	260 20	168 5	-13 11	X.
	5357		571	0.683	278 51	224 55	132 40	+16 40	G.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 10.	5358	160.503	571	0.670	282° 1'	221° 29'	129° 14'	+15° 7'	G ¹ .
	5359		571	0.617	286 26	226 9	133 54	+14 48	g.
	5360		571	0.595	287 4	227 5	134 50	+18 12	g ¹ .
	5361		572	0.297	184 10	195 14	102 59	-17 21	Y.
	5362		572	0.303	185 40	193 44	101 29	-18 9	Y ⁰ .
	5363		572	0.311	186 3	189 21	97 6	-18 55	y ¹ .
	5364		572	0.302	170 11	191 4	98 49	-19 15	y ⁰ .
	5365		572	0.308	172 16	188 38	96 23	-18 50	z.
	5366		573	0.944	58 40	115 27	23 12	+16 48	W.
11.	5367	161.468	568	0.984	269 9	265 36	159 40	+11 56	A.
	5368		568	0.992	270 1	266 43	160 47	+12 19	B.
	5369		568	0.990	270 50	262 37	156 41	+10 7	a.
	5370		568	0.962	269 59	258 22	152 26	+11 21	b.
	5371		572	0.402	219 47	207 33	101 37	-17 8	C.
	5372		572	0.408	220 10	204 43	98 47	-17 33	c.
	5373		573	0.884	56 44	131 44	25 48	+16 16	D.
	5374		573	0.880	57 37	129 22	23 26	+15 20	E.
	5375		573	0.875	57 47	126 2	20 6	+16 52	d.
	5376		573	0.862	58 24	127 45	21 49	+14 40	e.
	5377	161.491	568	0.988	269 1	265 44	159 29	+12 5	A.
	5378		568	0.993	270 32	265 53	159 38	+12 17	B.
	5379		568	0.991	271 6	262 40	156 25	+10 9	a.
	5380		572	0.406	219 20	208 13	101 58	-17 25	C.
	5381		572	0.413	220 30	205 19	99 4	-17 40	c.
	5382		573	0.880	56 29	131 23	25 8	+16 12	D.
	5383		573	0.876	57 52	130 4	23 49	+15 31	E.
	5384		573	0.871	56 17	126 21	20 6	+17 0	d.
	5385		573	0.857	58 16	127 52	21 37	+14 46	e.
13.	5386	163.644	572	0.781	237 25	235 36	98 49	-18 28	A.
	5387		572	0.786	238 18	236 28	99 41	-17 34	a.
	5388		573	0.472	45 38	163 31	26 44	+14 9	B.
	5389		573	0.486	46 23	160 14	23 27	+16 29	C.
	5390		573	0.493	46 28	162 59	26 12	+17 19	D.
	5391		573	0.502	49 24	158 4	21 17	+17 50	b.
	5392		573	0.517	50 25	157 37	20 50	+14 37	c.
	5393		573	0.510	48 29	159 41	22 54	+15 16	d.
	5394		573	0.534	51 15	156 26	19 39	+16 11	E.
	5395		573	0.541	52 38	156 13	19 26	+18 40	e.
	5396		574	0.222	331 37	193 18	56 31	+12 14	E.
	5397		574	0.226	337 17	192 9	55 22	+12 21	G.
	5398		574	0.231	345 33	190 20	53 33	+12 40	H.
	5399		574	0.237	346 47	191 54	55 7	+12 46	f.
	5400		574	0.242	348 40	188 51	52 4	+13 19	g.
	5401		574	0.225	355 12	189 40	52 53	+14 11	h.
	5402		574	0.240	1 21	187 28	50 41	+13 14	K.
	5403		574	0.245	359 14	186 48	50 1	+14 25	k.
14.	5404	164.589	572	0.892	241 18	249 32	99 20	-17 19	M.
	5405		572	0.895	242 10	249 23	99 11	-18 46	m.
	5406		573	0.308	25 17	175 39	25 27	+14 18	A.
	5407		573	0.353	27 29	170 29	20 17	+17 31	B.
	5408		573	0.377	33 3	174 27	24 15	+16 57	C.
	5409		573	0.392	36 56	174 11	23 59	+15 19	a.
	5410		573	0.402	38 13	171 50	21 38	+15 59	b.
	5411		574	0.341	295 19	205 45	55 33	+12 7	D.
	5412		574	0.333	296 25	202 32	52 20	+14 28	d.
	5413		574	0.328	299 18	204 32	54 20	+13 32	E.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864.									
June 14.	5414	164.589	574	0.299	301° 37'	204° 53'	54° 41'	+14° 19'	e.
15.	5415	165.711	572	0.965	244 17	265 36	99 29	-17 14	X.
	5416		572	0.970	243 25	264 24	98 17	-18 55	x.
	5417		573	0.296	331 49	190 7	24 0	+17 35	A.
	5418		573	0.298	337 50	192 5	25 58	+16 41	B.
	5419		573	0.283	340 35	188 12	22 5	+16 19	C.
	5420		574	0.523	279 12	220 44	54 37	+12 31	D.
	5421		574	0.517	280 2	222 26	56 19	+14 5	d.
	5422		574	0.504	282 15	217 28	51 21	+13 28	E.
	5423		574	0.502	283 34	218 52	52 45	+12 34	e.
	5424		574	0.465	286 47	218 55	52 48	+14 17	F.
	5425		574	0.468	285 57	219 16	52 9	+14 0	f.
	5426		575	0.965	65 0	114 44	308 37	+14 29	M.
	5427		575	0.966	66 53	113 17	307 11	+12 10	m.
	5428		575	0.988	64 49	108 14	302 7	+12 0	m ^l .
16.	5429	166.501	573	0.366	308 12	203 9	25 50	+16 43	P.
	5430		573	0.371	309 33	200 3	22 44	+15 15	p.
	5431		573	0.382	311 58	201 0	23 41	+17 33	p ^l .
	5432		574	0.670	277 58	232 51	55 32	+13 14	A.
	5433		574	0.662	278 20	228 50	51 31	+14 5	B.
	5434		574	0.624	278 21	232 17	54 58	+14 17	C.
	5435		574	0.638	279 21	233 22	56 3	+13 57	a.
	5436		574	0.611	282 19	233 12	55 53	+13 20	b.
	5437		574	0.583	283 9	229 34	52 15	+12 41	c.
	5438		575	0.912	67 24	125 4	307 45	+14 58	M.
	5439		575	0.917	66 45	123 29	306 10	+13 40	M ^o .
	5440		575	0.918	66 0	126 12	308 53	+12 3	m.
	5441		575	0.954	65 54	118 35	301 16	+12 24	n.
	5442		575	0.959	65 6	117 58	300 39	+12 19	o.
	5443	166.534	573	0.370	308 57	203 46	25 58	+16 44	P.
	5444		573	0.374	309 27	199 55	22 7	+15 19	p.
	5445		573	0.385	310 44	200 58	23 10	+17 37	p ^l .
	5446		574	0.672	277 19	232 57	55 9	+13 11	A.
	5447		574	0.666	279 32	228 49	51 1	+14 9	B.
	5448		574	0.630	278 25	232 31	54 43	+14 29	C.
	5449		574	0.641	279 42	234 9	56 21	+14 2	a.
	5450		574	0.615	282 39	233 20	55 32	+13 23	b.
	5451		574	0.588	282 50	230 10	52 22	+12 45	c.
	5452		575	0.910	67 44	125 3	307 15	+14 50	M.
	5453		575	0.913	67 12	123 53	306 5	+13 41	M ^o .
	5454		575	0.912	66 16	126 3	308 15	+12 14	m.
	5455		575	0.950	65 47	119 46	301 58	+12 26	n.
	5456		575	0.955	64 30	118 3	300 15	+12 21	o.
17.	5457	167.580	573	0.588	281 49	217 8	24 31	+17 37	A.
	5458		573	0.602	281 48	214 59	22 22	+15 38	B.
	5459		573	0.624	283 15	218 15	25 38	+17 34	C.
	5460		573	0.520	293 20	213 51	21 14	+15 36	a.
	5461		573	0.509	294 10	213 14	20 37	+16 44	b.
	5462		573	0.497	295 10	212 53	20 16	+16 49	c.
	5463		574	0.855	274 33	248 57	56 20	+13 45	D.
	5464		574	0.843	272 15	243 12	50 35	+14 18	E.
	5465		574	0.849	274 28	244 18	51 37	+13 29	F.
	5466		574	0.812	273 51	248 36	55 59	+14 41	d.
	5467		574	0.800	276 14	247 34	54 57	+14 19	e.
	5468		574	0.792	278 13	246 8	53 31	+14 23	f.
	5469		575	0.790	63 35	137 53	305 16	+13 35	G.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 17.	5470	167.580	575	0.795	64° 46'	139° 42'	307° 5'	+14° 56'	G ⁰ .
	5471		575	0.814	63 59	140 55	308 18	+12 51	g ¹ .
	5472		575	0.845	62 37	134 43	302 6	+13 59	g ² .
	5473		575	0.862	62 15	133 45	301 8	+12 21	g ³ .
18.	5474	168.477	573	0.746	278 0	230 38	25 17	+17 33	A.
	5475		573	0.742	278 28	228 10	22 49	+15 20	a.
	5476		574	0.934	273 37	260 5	54 44	+13 1	M.
	5477		574	0.930	274 50	256 2	50 41	+13 24	M ¹ .
	5478		574	0.886	275 31	256 55	51 34	+13 51	m.
	5479		574	0.890	275 44	260 37	55 16	+14 29	n.
	5480		574	0.892	276 48	258 11	52 50	+13 45	o.
	5481		575	0.633	62 39	148 50	303 29	+12 36	P.
	5482		575	0.648	62 17	147 58	302 37	+14 38	P ⁰ .
	5483		575	0.650	61 33	155 0	309 39	+14 3	p.
	5484		575	0.710	60 12	152 49	307 28	+12 12	p ¹ .
	5485		575	0.666	60 28	146 44	301 23	+12 39	Q.
	5486		575	0.689	61 12	146 30	300 59	+13 20	q.
	5487		575	0.724	63 30	146 32	301 11	+14 34	q ¹ .
20.	5488	170.499	575	0.310	38 35	183 53	309 51	+11 40	M.
	5489		575	0.322	39 20	182 2	308 0	+12 12	N.
	5490		575	0.324	39 17	180 11	306 9	+12 52	O.
	5491		575	0.348	40 20	179 8	305 6	+12 27	m.
	5492		575	0.371	40 44	179 11	305 9	+13 14	n.
	5493		575	0.390	42 33	178 40	304 38	+14 5	o.
	5494		575	0.384	41 26	177 11	303 9	+13 6	P.
	5495		575	0.394	43 42	176 4	302 2	+14 51	p.
21.	5496	171.467	575	0.210	355 38	188 13	300 28	+12 43	M.
	5497		575	0.247	356 51	195 0	307 15	+12 38	M ⁰ .
	5498		575	0.252	1 6	194 22	306 37	+13 21	N.
	5499		575	0.281	3 27	196 1	308 16	+13 4	a.
	5500		575	0.279	6 9	190 40	302 55	+14 27	b.
	5501	171.511	575	0.208	355 26	188 54	300 31	+12 38	M.
	5502		575	0.244	356 9	195 17	306 54	+12 44	M ⁰ .
	5503		575	0.248	0 52	194 53	306 30	+13 15	N.
	5504		575	0.276	3 18	197 4	308 41	+13 10	a.
	5505		575	0.271	5 37	191 32	303 9	+14 34	b.
23.	5506	173.607	575	0.354	276 38	216 4	297 57	+ 9 58	A.
	5507		575	0.362	277 54	218 0	299 53	+ 8 8	B.
	5508		575	0.384	281 28	217 22	299 15	+ 7 37	C.
	5509		575	0.385	280 20	224 23	306 16	+ 6 41	a.
	5510		575	0.402	285 35	225 29	307 22	+10 29	b.
	5511		575	0.474	286 17	227 41	309 34	+11 8	C.
	5512		575	0.490	288 48	226 36	308 29	+12 50	D.
	5513		575	0.455	284 16	228 43	310 36	+12 24	d.
	5514		575	0.493	289 36	227 24	309 17	+12 17	d ¹ .
24.	5515	174.539	575	0.515	278 12	233 1	301 41	+10 59	M.
	5516		575	0.537	289 3	230 24	299 4	+ 6 26	N.
	5517		575	0.526	286 39	237 39	306 19	+ 6 40	O.
	5518		575	0.588	282 15	239 43	308 23	+ 8 45	m.
	5519		575	0.602	279 38	242 9	310 49	+11 30	n.
	5520		575	0.594	283 28	238 45	307 25	+12 25	o.
	5521		575	0.641	280 44	234 33	303 13	+ 9 44	m ⁰ .
	5522		575	0.636	284 9	238 58	307 38	+12 37	n ⁰ .
	5523		575	0.658	286 56	238 26	307 6	+11 49	o ⁰ .
	5524	174.549	575	0.520	277 54	233 40	302 12	+11 4	M.
	5525		575	0.539	288 43	230 32	299 4	+ 6 27	N.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864.									
June 24.	5526	174.549	575	0.530	286 57	237 51	306 23	+ 6 38	O.
	5527		575	0.592	282 22	240 2	308 34	+ 8 50	m.
	5528		575	0.605	279 38	242 18	310 50	+11 35	n.
	5529		575	0.597	283 45	238 49	307 21	+12 18	o.
	5530		575	0.644	281 54	234 39	303 11	+ 9 40	m ^o .
	5531		575	0.638	284 18	239 16	307 48	+12 36	n ^o .
	5532		575	0.661	287 37	238 40	307 12	+11 33	o ^o .
30.	5533	180.642	576	0.472	65 4	180 37	162 43	+ 7 11	A.
	5534		576	0.481	65 46	180 19	162 25	+ 8 7	B.
	5535		576	0.485	67 29	178 7	160 13	+ 6 6	C.
July 1.	5536	181.645	576	0.302	55 49	194 43	162 35	+ 7 59	A.
	5537		576	0.286	62 3	192 21	160 13	+ 8 40	a.
	5538		577	0.764	93 37	157 36	125 24	- 5 25	B.
	5539		577	0.799	93 4	156 26	124 18	- 5 17	b.
	5540		577	0.809	95 33	154 18	122 10	- 6 11	c.
	5541		578	0.976	102 26	120 56	88 48	-13 20	C.
2.	5542	182.511	576	0.096	1 56	206 31	162 15	+ 9 7	A ^o .
	5543		576	0.152	2 25	205 50	161 34	+ 8 34	a ^o .
	5544		577	0.594	97 28	173 21	129 5	- 6 34	B ^o .
	5545		577	0.602	97 37	170 57	126 41	- 6 26	b ^o .
	5546		577	0.641	98 13	171 15	126 59	- 6 32	C.
	5547		577	0.653	99 20	169 59	125 43	- 7 9	c.
	5548		578	0.922	103 36	136 57	92 41	-14 29	M.
	5549	182.547	576	0.098	2 17	207 2	162 7	+ 9 12	A ^o .
	5550		576	0.151	2 39	206 31	161 36	+ 8 40	a ^o .
	5551		577	0.592	97 59	173 49	128 54	- 6 28	B ^o .
	5552		577	0.600	98 12	171 30	126 35	- 6 25	b ^o .
	5553		577	0.637	98 41	171 50	126 55	- 6 38	C.
	5554		577	0.650	99 26	170 24	125 29	- 7 14	c.
	5555		578	0.920	104 0	137 28	92 33	-14 36	M.
4.	5556	184.510	576	0.473	286 59	233 52	161 6	+ 8 39	A.
	5557		577	0.235	130 14	197 55	125 9	- 6 32	M.
	5558		577	0.271	127 29	198 59	126 13	- 6 54	N.
	5559		577	0.284	124 9	201 7	128 21	- 7 9	m.
	5560		578	0.685	113 32	165 1	92 15	-14 21	O ^o .
	5561		579	0.982	76 53	139 10	66 24	+ 8 8	O.
	5562	184.524	576	0.476	287 47	234 20	161 22	+ 8 44	A.
	5563		577	0.233	130 19	198 9	125 11	- 6 39	M.
	5564		577	0.267	127 21	199 3	126 5	- 7 0	N.
	5565		577	0.281	124 42	201 32	128 34	- 7 2	m.
	5566		578	0.682	113 18	165 14	92 16	-14 25	O ^o .
	5567		579	0.979	76 14	139 29	66 31	+ 8 12	O.
5.	5568	185.496	576	0.624	282 30	248 52	162 7	+ 8 50	A.
	5569		577	0.164	183 4	212 14	125 29	- 6 33	B.
	5570		577	0.170	181 15	212 40	125 55	- 6 31	C.
	5571		577	0.178	177 43	215 18	128 33	- 7 18	c.
	5572		578	0.517	123 47	179 32	92 47	-14 17	D.
	5573		579	0.889	69 30	153 39	66 54	+ 8 10	d.
	5574		579	0.895	70 55	151 28	64 43	+10 19	E.
	5575		579	0.902	73 10	144 4	57 19	+11 47	e.
	5576		579	0.912	75 56	144 49	58 4	+12 50	f.
	5577	185.507	576	0.622	282 15	249 53	162 58	+ 8 55	A.
	5578		577	0.161	182 12	212 53	125 58	- 6 24	B.
	5579		577	0.167	181 27	213 47	126 52	- 6 33	C.
	5580		577	0.175	177 22	215 33	128 38	- 7 20	c.
	5581		578	0.512	124 46	179 42	92 47	-14 24	D.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. July 5.	5582	185.507	579	0.888	69° 27'	153° 0'	66° 5'	+ 8° 33'	d.
	5583		579	0.893	70 49	151 52	64 57	+10 22	E.
	5584		579	0.899	73 20	144 1	57 6	+11 51	e.
	5585		579	0.908	75 13	145 12	58 17	+12 53	f.
6.	5586	186.628	576	0.854	279 8	264 28	161 40	+ 7 47	A.
	5587		576	0.823	281 44	264 55	162 7	+ 8 44	a.
	5588		577	0.334	236 24	229 14	126 26	— 7 57	B.
	5589		577	0.329	234 16	230 41	127 53	— 6 26	b.
	5590		578	0.395	146 56	196 43	93 55	—14 6	C.
	5591		579	0.705	72 58	168 52	66 4	+ 6 42	D.
	5592		579	0.716	72 32	166 59	64 11	+ 6 14	E.
	5593		579	0.721	73 24	160 4	57 16	+11 48	F.
	5594		579	0.744	67 58	161 13	58 25	+10 54	F ¹ .
	5595		579	0.758	68 32	162 27	59 39	+12 9	d.
	5596		579	0.795	74 31	161 9	58 21	+13 38	e.
	5597		579	0.803	75 45	160 50	58 2	+12 37	f.
	5598		579	0.811	76 47	160 1	57 13	+ 8 16	f ¹ .
	5599	186.636	576	0.856	279 48	263 55	161 0	+ 7 53	A.
	5600		576	0.827	281 0	265 54	162 59	+ 8 46	a.
	5601		577	0.337	236 27	229 33	126 38	— 7 59	B.
	5602		577	0.331	234 11	230 36	127 41	— 6 20	b.
	5603		578	0.399	146 21	195 59	93 4	—14 5	C.
	5604		579	0.702	73 41	169 8	66 13	+ 6 44	D.
	5605		579	0.711	72 31	167 2	64 7	+ 6 18	E.
	5606		579	0.719	73 34	160 20	57 25	+11 51	F.
	5607		579	0.742	67 51	161 23	58 28	+10 57	F ¹ .
	5608		579	0.756	68 21	162 29	59 34	+12 6	d.
	5609		579	0.791	74 7	161 32	58 37	+13 40	e.
	5610		579	0.800	75 56	161 21	58 26	+12 40	f.
	5611		579	0.808	75 13	160 10	57 15	+ 8 10	f ¹ .
7.	5612	187.491	576	0.921	281 32	276 15	161 9	+ 6 20	M.
	5613		576	0.915	283 59	275 42	160 36	+ 7 57	m.
	5614		576	0.913	284 29	277 8	162 2	+ 8 18	n.
	5615		577	0.485	244 46	241 9	126 3	— 7 10	A.
	5616		577	0.481	246 1	242 19	127 13	— 6 19	a.
	5617		578	0.317	179 44	207 12	92 6	—14 4	B.
	5618		579	0.535	69 7	181 3	65 57	+ 7 15	C.
	5619		579	0.539	68 58	182 0	66 54	+ 6 30	D.
	5620		579	0.596	63 7	178 51	63 45	+12 59	E.
	5621		579	0.598	64 46	177 15	62 9	+13 56	c.
	5622		579	0.641	75 13	173 8	58 2	+ 6 4	d.
	5623		579	0.638	76 9	172 48	57 42	+ 6 21	e.
	5624	187.499	576	0.924	281 17	277 9	161 59	+ 6 14	M.
	5625		576	0.918	284 44	275 58	160 48	+ 8 9	m.
	5626		576	0.916	283 56	277 53	162 43	+ 8 22	n.
	5627		577	0.488	245 29	241 56	126 46	— 7 12	A.
	5628		577	0.486	245 48	242 38	127 28	— 6 29	a.
	5629		578	0.319	179 32	207 52	92 42	—14 10	B.
	5630		579	0.532	69 9	180 21	65 11	+ 7 21	C.
	5631		579	0.536	68 42	182 13	67 3	+ 6 32	D.
	5632		579	0.594	63 7	178 59	63 49	+12 54	E.
	5633		579	0.595	64 29	177 42	62 32	+13 59	c.
	5634		579	0.635	75 37	173 19	58 9	+ 6 11	d.
	5635		579	0.633	76 20	172 48	57 38	+ 6 17	e.
9.	5636	189.492	578	0.517	233 28	238 48	95 22	—15 58	A.
	5637		579	0.156	50 15	203 17	59 51	+ 9 24	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. July 9.	5638	189.492	579	0.171	51° 23'	201° 15'	57° 49'	+ 8° 57'	b.
	5639		579	0.194	54 16	199 56	56 30	+ 8 19	C.
	5640		579	0.221	56 34	198 48	55 22	+10 13	c.
	5641		581	0.398	77 42	191 39	48 13	+ 6 32	D.
	5642		581	0.405	77 0	190 59	47 33	+ 6 13	E.
	5643		581	0.464	78 59	188 42	45 16	+ 5 1	F.
	5644		581	0.481	78 0	188 23	44 57	+ 6 39	d.
	5645		581	0.495	76 5	185 7	41 41	+ 7 20	e.
	5646		581	0.502	76 42	185 58	42 32	+ 8 33	f.
	5647		582	0.971	73 21	138 54	355 28	+ 9 34	G.
	5648		582	0.976	74 41	132 10	348 44	+10 2	g.
	5649		582	0.988	75 8	135 48	352 22	+ 8 20	H.
	5650		582	0.992	76 38	130 3	346 37	+ 8 39	h.
	5651	189.518	578	0.520	233 30	239 17	95 29	-16 4	A.
	5652		579	0.152	50 7	203 34	59 46	+ 9 29	B.
	5653		579	0.169	51 47	201 48	58 0	+ 8 53	b.
	5654		579	0.190	54 27	200 10	56 22	+ 8 16	C.
	5655		579	0.217	56 11	198 59	55 11	+10 11	c.
	5656		581	0.395	77 16	191 44	47 56	+ 6 28	D.
	5657		581	0.402	77 58	191 22	47 34	+ 6 18	E.
	5658		581	0.461	78 22	188 49	45 1	+ 5 9	F.
	5659		581	0.479	78 26	188 17	45 29	+ 6 44	d.
	5660		581	0.492	76 7	185 31	41 43	+ 7 29	e.
	5661		581	0.499	76 20	186 11	42 23	+ 8 28	f.
	5662		582	0.966	73 34	139 2	355 14	+ 9 37	G.
	5663		582	0.975	74 2	132 24	349 36	+ 9 54	g.
	5664		582	0.984	74 34	136 0	353 12	+ 8 22	H.
	5665		582	0.989	75 31	130 14	346 26	+ 8 43	h.
11.	5666	191.499	578	0.830	254 39	266 25	94 31	-15 32	M.
	5667		579	0.299	301 46	229 40	57 46	+ 8 39	A.
	5668		579	0.304	302 31	228 2	56 8	+ 8 46	B.
	5669		579	0.317	305 20	231 35	59 41	+10 47	C.
	5670		579	0.311	306 55	229 57	58 3	+ 9 35	a.
	5671		579	0.325	304 6	229 28	57 34	+10 7	b.
	5672		579	0.328	308 42	229 16	57 22	+ 8 58	c.
	5673		581	0.194	300 8	213 29	43 35	+ 5 19	D.
	5674		581	0.190	307 10	219 26	47 32	+ 7 58	E.
	5675		581	0.146	326 39	218 26	46 32	+ 6 41	F.
	5676		581	0.123	331 4	215 20	43 26	+ 6 1	d.
	5677		581	0.106	354 29	214 49	42 55	+ 7 51	e.
	5678		581	0.090	2 2	217 26	45 32	+ 5 48	f.
	5679		582	0.799	75 13	164 44	352 50	+ 9 50	P.
	5680		582	0.821	76 51	163 0	351 6	+10 20	Q.
	5681		582	0.852	77 29	161 21	349 27	+ 8 55	R.
	5682		582	0.855	76 58	159 29	347 35	+ 8 9	p.
	5683		582	0.869	77 47	167 13	355 19	+ 9 16	q.
	5684		582	0.876	79 18	165 26	353 32	+ 9 57	r.
	5685	191.516	578	0.832	253 26	267 8	95 0	-15 28	M.
	5686		579	0.302	300 54	229 49	57 41	+ 8 43	A.
	5687		579	0.308	301 28	228 56	56 48	+ 8 41	B.
	5688		579	0.320	305 24	231 52	59 44	+10 49	C.
	5689		579	0.316	306 46	230 45	58 37	+ 9 40	a.
	5690		579	0.330	304 26	229 25	57 17	+ 9 59	b.
	5691		579	0.333	308 14	229 28	57 20	+ 8 47	c.
	5692		581	0.197	300 47	215 20	43 12	+ 5 22	D.
	5693		581	0.193	307 10	219 40	47 32	+ 7 50	E.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. July 11.	5694	191.516	581	0.148	331° 38'	219° 5'	46° 57'	+ 6° 39'	F.
	5695		581	0.126	335 59	215 22	43 14	+ 5 54	d.
	5696		581	0.111	356 32	215 7	42 59	+ 7 52	e.
	5697		581	0.096	2 46	217 38	45 30	+ 5 44	f.
	5698		582	0.796	75 31	164 14	352 6	+ 9 52	P.
	5699		582	0.816	76 51	163 52	351 44	+10 7	Q.
	5700		582	0.848	77 53	161 49	349 41	+ 8 50	R.
	5701		582	0.853	76 21	159 58	347 50	+ 8 8	p.
	5702		582	0.865	76 12	167 32	355 24	+ 9 11	q.
	5703		582	0.873	79 2	165 22	353 14	+10 3	r.
13.	5704	193.627	579	0.671	283 12	259 9	57 3	+ 8 6	M.
	5705		579	0.689	285 38	257 29	55 23	+ 9 12	m.
	5706		579	0.698	286 28	260 40	58 34	+10 15	N.
	5707		581	0.622	278 19	248 32	46 26	+ 6 42	A.
	5708		581	0.617	277 24	249 22	47 16	+ 7 56	a.
	5709		581	0.493	281 1	249 49	47 43	+ 6 4	a°.
	5710		582	0.393	61 48	196 33	354 28	+ 9 22	B.
	5711		582	0.427	63 27	197 57	355 52	+ 8 8	C.
	5712		582	0.439	65 50	195 44	353 39	+ 8 10	D.
	5713		582	0.474	62 8	188 57	346 52	+ 7 7	E.
	5714		582	0.502	69 34	189 26	347 21	+11 33	b.
	5715		582	0.491	67 5	187 24	345 19	+10 6	c.
	5716		582	0.546	68 58	190 5	348 0	+ 8 28	d.
	5717		582	0.552	71 21	186 57	344 52	+ 8 22	e.
14.	5718	194.521	579	0.825	285 59	270 29	55 43	+ 8 55	A.
	5719		579	0.817	285 38	272 30	57 44	+ 9 34	B.
	5720		579	0.803	287 30	271 57	57 11	+ 9 13	C.
	5721		581	0.784	281 4	262 24	47 38	+ 6 3	a.
	5722		581	0.709	280 57	260 30	45 44	+ 5 9	b.
	5723		581	0.637	280 6	261 58	47 12	+ 7 15	c.
	5724		582	0.223	37 32	210 58	356 12	+11 47	D.
	5725		582	0.256	39 15	210 10	355 24	+10 51	E.
	5726		582	0.241	44 13	207 14	352 28	+10 29	F.
	5727		582	0.273	47 35	208 15	353 29	+ 8 35	d.
	5728		582	0.265	49 21	208 42	353 56	+ 8 53	e.
	5729		582	0.284	51 38	207 7	352 21	+ 7 42	f.
	5730		583	0.311	58 7	202 21	347 35	+ 9 27	G.
	5731		583	0.357	58 56	202 18	347 32	+ 9 35	g.
	5732		583	0.389	61 47	199 44	344 58	+10 8	H.
	5733		583	0.394	63 23	198 56	344 10	+10 29	h.
	5734		583	0.404	65 13	197 41	342 55	+11 16	n.
15.	5735	195.506	579	0.932	281 46	283 52	55 8	+ 8 20	S.
	5736		579	0.945	283 24	284 54	56 10	+ 9 58	s.
	5737		579	0.956	284 32	285 43	56 59	+ 8 8	s ¹ .
	5738		581	0.899	278 22	274 18	45 34	+ 6 19	A.
	5739		581	0.771	277 56	276 8	47 24	+ 5 30	a.
	5740		582	0.229	332 47	223 59	355 15	+10 22	B.
	5741		582	0.215	337 11	224 56	356 12	+10 2	C.
	5742		582	0.196	345 20	220 27	351 43	+11 20	b.
	5743		582	0.174	351 34	220 51	352 7	+ 9 46	c.
	5744		583	0.196	14 22	216 11	347 27	+ 7 9	D.
	5745		583	0.209	18 11	215 37	346 53	+ 8 41	E.
	5746		583	0.238	25 28	213 1	344 17	+ 9 40	F.
	5747		583	0.242	27 16	210 58	342 14	+ 9 54	d.
	5748		583	0.247	32 55	213 44	345 0	+10 9	e
	5749		583	0.251	35 48	213 37	344 53	+ 8 48	f.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. July 16.	5750	196.499	579	0.982	285° 49'	299° 35'	56° 46'	+ 8° 18'	A.
	5751		579	0.994	286 55	298 45	55 56	+ 8 5	a.
	5752		581	0.970	281 5	289 9	46 20	+ 6 56	M.
	5753		582	0.311	297 17	237 35	354 46	+10 30	B.
	5754		582	0.348	299 37	239 9	356 20	+11 52	C.
	5755		582	0.375	304 13	238 3	355 14	+ 9 32	D.
	5756		582	0.392	305 21	235 9	352 20	+ 9 15	b.
	5757		582	0.407	308 7	234 28	351 39	+ 9 1	c.
	5758		583	0.286	311 38	227 27	344 38	+ 8 40	S.
	5759		583	0.251	317 36	229 21	346 32	+ 9 35	O.
	5760		583	0.269	324 21	228 0	345 11	+ 8 5	P.
	5761		583	0.222	314 34	224 12	341 23	+ 9 41	s.
	5762		583	0.251	325 25	224 59	342 10	+ 9 13	o.
	5763		583	0.219	328 42	223 53	341 4	+10 55	p.
	5764		583	0.216	329 22	227 36	344 47	+ 8 20	q.
19.	5765	199.623	582	0.807	287 15	276 31	349 43	+ 8 57	A.
	5766		582	0.841	288 47	279 40	352 32	+ 9 55	B.
	5767		582	0.852	288 57	280 30	353 22	+ 9 58	a.
	5768		582	0.866	289 14	283 59	356 51	+10 31	b.
	5769		583	0.705	288 9	269 51	342 43	+11 11	C.
	5770		583	0.724	289 26	272 19	345 11	+ 8 45	D.
	5771		583	0.754	290 43	272 2	344 4	+ 9 52	E.
	5772		583	0.769	288 42	272 20	345 12	+ 8 55	c.
	5773		583	0.771	290 19	268 15	341 7	+10 46	d.
20.	5774	200.503	582	0.902	289 11	293 29	353 53	+ 9 33	S.
	5775		582	0.946	290 53	295 3	355 27	+ 8 2	s.
	5776		582	0.956	291 43	295 27	356 21	+10 13	s ¹ .
	5777		583	0.894	288 55	283 46	344 10	+11 52	A.
	5778		583	0.887	290 42	282 50	343 14	+ 9 55	a.
	5779		583	0.881	290 42	283 49	344 13	+10 9	a ¹ .
21.	5780	201.524	583	0.991	287 54	299 33	345 27	+ 8 2	A.
	5781		583	0.985	289 10	298 42	344 36	+10 54	a.
	5782		585	0.394	130 0	206 33	252 27	-11 27	B.
	5783		584	0.922	111 16	158 3	203 57	-19 45	C.
23.	5784	203.603	581	0.411	236 18	240 20	256 45	-11 46	A.
	5785		585	0.387	229 50	235 37	252 2	- 9 27	a.
	5786		584	0.694	126 20	188 5	204 30	-20 43	B.
25.	5787	205.606	No spot visible.						
26.	5788	206.497	585a	0.372	301 21	247 28	222 50	+11 9	A.
	5789		584a	0.384	227 14	237 39	213 1	-17 4	B.
	5790		584a	0.376	198 37	235 27	210 59	-19 39	C.
	5791		584a	0.389	191 46	233 19	208 41	-18 52	b.
	5792	206.591	585a	0.376	301 52	248 42	222 44	+11 13	A.
	5793		584a	0.379	227 38	239 24	213 26	-17 10	B.
	5794		584a	0.370	197 50	237 6	211 8	-19 36	C.
	5795		584a	0.382	191 2	234 40	208 42	-18 57	b.
27.	5796	207.641	585a	0.591	293 33	263 16	222 24	+11 37	a.
	5797		585a	0.572	294 4	265 30	224 38	+10 8	b.
	5798		585a	0.554	295 28	262 6	221 14	+11 5	c.
	5799		584a	0.423	225 47	251 39	210 47	-17 56	a ⁰ .
	5800		584a	0.454	227 16	252 33	211 41	-17 9	b ⁰ .
	5801		584a	0.467	229 21	254 43	213 51	-19 25	c ⁰ .
	5802	207.651	585a	0.594	293 46	263 3	222 3	+11 46	a.
	5803		585a	0.576	294 29	265 23	224 23	+10 7	b.
	5804		585a	0.560	295 7	262 41	221 41	+11 12	c.
	5805		584a	0.427	225 8	251 10	210 10	-18 0	a ⁰ .

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864.									
July 27.	5806	207.651	584a	0.459	227° 42'	252° 30'	211° 30'	-17° 6'	b ^o .
	5807		584a	0.470	229 32	254 33	213 33	-19 33	c ^o .
29.	5808	209.509	585a	0.888	291 30	291 13	223 51	+11 9	A.
	5809		584a	0.711	250 28	279 0	211 38	-18 32	B.
Aug. 1.	5810	212.505	586	0.376	171 21	236 53	127 1	-19 34	A.
	5811		586	0.361	179 0	231 33	121 41	-15 35	B.
	5812		586	0.347	182 59	232 0	122 8	-17 33	a.
	5813		586	0.321	185 18	229 32	119 40	-14 9	b.
	5814		587	0.884	85 57	167 34	57 42	+ 8 34	C.
	5815		587	0.886	86 57	168 36	58 34	+ 7 46	D.
	5816		587	0.912	92 55	165 56	56 4	+ 3 30	E.
	5817		587	0.929	98 36	167 0	57 8	+ 2 57	c.
	5818		587	0.943	94 56	169 31	59 39	+ 0 17	d.
2.	5819	213.678	586	0.394	230 38	252 2	125 32	-15 50	a.
	5820		586	0.370	228 11	251 15	124 45	-18 4	b.
	5821		586	0.357	224 13	249 19	122 49	-19 43	c.
	5822		587	0.741	88 8	183 49	57 19	+ 6 27	A.
	5823		587	0.792	86 9	185 59	59 29	+ 5 14	B.
	5824		587	0.810	93 34	185 1	58 31	+ 6 52	C.
	5825		587	0.817	94 58	183 11	56 41	+ 1 26	D.
4.	5826	215.616	586	0.699	258 11	276 15	122 16	-12 37	M.
	5827		586	0.682	256 38	275 17	121 18	-11 20	N.
	5828		586	0.644	253 13	273 48	119 49	-11 14	m.
	5829		586	0.624	251 41	270 51	116 52	-10 11	n.
	5830		587	0.432	78 38	215 40	61 41	+ 8 44	S.
	5831		587	0.450	81 15	213 12	59 13	+ 7 11	T.
	5832		587	0.471	84 28	211 54	57 55	+ 1 36	s.
	5833		587	0.489	93 48	209 3	55 4	- 0 35	t.
5.	5834	216.505	586	0.847	263 23	289 15	122 39	-12 18	A.
	5835		586	0.823	262 29	286 30	119 54	-10 2	a.
	5836		586	0.820	259 11	287 7	120 31	-11 31	B.
	5837		586	0.809	259 16	288 22	121 46	-11 26	b.
	5838		587	0.304	94 25	225 8	58 32	+ 7 31	C.
	5839		587	0.307	94 39	223 49	57 13	+ 8 4	c.
	5840		589	0.972	113 29	223 12	56 36	-18 39	S.
6.	5841	217.530	586	0.902	267 30	302 35	121 27	-11 47	M.
	5842		586	0.884	266 22	300 58	119 50	-11 2	m.
	5843		587	0.060	58 40	239 22	58 14	+ 6 43	O.
	5844		589	0.892	117 20	185 37	4 29	-19 31	P.
	5845		589	0.917	117 35	182 51	1 43	-18 38	p.
	5846		590	0.966	94 29	164 5	342 57	+ 5 13	A.
	5847		590	0.964	95 41	160 37	339 29	+ 4 28	B.
8.	5848	219.605	587	0.473	286 27	268 22	57 48	+ 8 58	A.
	5849		587	0.439	287 6	266 41	56 7	+ 8 28	a.
	5850		592	0.494	239 26	263 28	52 54	-12 3	M.
	5851		592	0.487	237 51	263 48	53 14	-12 44	N.
	5852		592	0.483	237 22	261 12	50 38	-13 15	O.
	5853		589	0.611	132 35	214 36	4 2	-16 53	B.
	5854		589	0.599	130 16	215 50	5 16	-21 46	C.
	5855		589	0.575	128 42	212 8	1 34	-19 44	b.
	5856		589	0.564	127 12	210 24	359 50	-19 7	c.
	5857		588	0.674	126 44	205 56	355 22	-17 54	S.
	5858		588	0.678	125 48	208 22	357 48	-16 12	s.
	5859		591	0.855	122 58	186 34	336 0	-18 7	T.
	5860		591	0.859	115 30	185 24	334 50	-19 38	t.
	5861		590	0.764	96 2	196 32	345 58	+ 4 31	P.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Aug. 8.	5862	219.605	590	0.777	95° 5'	192° 12'	341° 38'	+ 6° 7'	Q.
	5863		590	0.795	90 1	190 59	340 25	+ 4 33	R.
	5864		590	0.782	89 9	189 24	338 50	+ 4 58	p.
	5865		590	0.819	92 49	188 15	337 41	+ 1 31	q.
	5866		590	0.821	89 44	189 32	338 58	+ 1 11	r.
10.	5867	221.482	587	0.795	287 54	296 32	59 21	+ 9 0	A ^o .
	5868		592	0.782	262 2	290 6	52 55	-12 26	A.
	5869		592	0.765	261 54	289 40	52 29	-13 19	B.
	5870		592	0.754	259 39	288 41	51 30	-13 55	C.
	5871		592	0.748	258 58	285 29	48 18	-12 5	a.
	5872		592	0.711	256 35	286 10	48 59	-14 51	b.
	5873		592	0.708	256 22	284 0	46 59	-11 19	c.
	5874		593	0.208	305 29	253 43	16 32	+ 7 58	M.
	5875		589	0.302	182 20	242 38	5 27	-16 42	D.
	5876		589	0.327	178 18	241 43	4 32	-18 29	E.
	5877		589	0.354	175 28	236 1	358 50	-19 26	d.
	5878		589	0.395	170 50	237 16	0 5	-17 21	e.
	5879		589	0.383	171 17	238 21	1 10	-20 11	T.
	5880		589	0.408	165 41	235 5	357 54	-21 50	t.
	5881		588	0.375	158 41	233 29	356 18	-17 46	F.
	5882		588	0.381	157 2	233 28	356 17	-18 21	f.
	5883		591	0.552	135 45	218 31	341 20	-16 57	Q.
	5884		591	0.558	136 5	215 21	338 10	-18 54	R.
	5885		591	0.567	138 19	216 2	338 51	-19 48	S.
	5886		591	0.561	139 29	213 51	336 40	-20 40	q.
	5887		591	0.588	136 47	212 56	335 45	-22 5	r.
	5888		591	0.596	131 8	211 42	334 31	-22 47	s.
	5889		591	0.633	129 17	211 35	334 24	-22 27	s ¹ .
	5890		591	0.647	126 40	209 58	332 47	-23 27	s ¹¹ .
	5891		590	0.412	89 50	221 5	343 54	+ 1 40	K.
	5892		590	0.433	90 39	220 35	343 24	+ 3 28	L.
	5893		590	0.431	92 0	219 42	342 31	+ 4 57	k.
	5894		590	0.482	94 37	218 44	341 33	+ 6 27	l.
	5895		590	0.495	93 35	217 21	340 10	+ 4 25	w.
	5896		590	0.529	91 35	215 57	338 46	+ 7 5	w ¹ .
	5897		590	0.554	88 12	214 56	337 45	+ 1 26	u.
	5898		590	0.567	86 35	212 11	335 0	+ 2 44	u ¹ .
11.	5899	222.466	592	0.874	262 36	298 55	47 46	-12 54	A.
	5900		592	0.902	265 8	303 44	52 25	-13 40	B.
	5901		592	0.923	266 15	300 48	49 39	-12 22	a.
	5902		592	0.925	266 26	302 19	51 10	-12 39	b.
	5903		588	0.302	191 13	246 24	355 15	-17 58	C.
	5904		588	0.323	192 57	247 56	356 47	-18 37	c.
	5905		588	0.338	195 7	245 17	354 8	-16 58	D.
	5906		588	0.357	196 37	247 34	356 25	-17 44	d.
	5907		589	0.315	208 58	252 59	1 50	-21 6	E.
	5908		589	0.339	210 20	248 47	357 38	-18 12	e ^o .
	5909		589	0.342	217 5	255 32	4 23	-17 55	e ¹ .
	5910		589	0.387	223 5	250 29	359 20	-20 22	e ¹¹ .
	5911		589	0.366	214 20	254 47	3 38	-16 28	F.
	5912		589	0.387	225 34	256 56	5 47	-18 24	f.
	5913		589	0.392	226 52	257 22	6 13	-18 17	G.
	5914		589	0.399	225 0	255 12	4 3	-18 17	g.
	5915		590	0.215	73 33	233 7	341 58	+ 2 34	H.
	5916		590	0.264	76 57	235 52	344 43	+ 4 41	L.
	5917		590	0.242	77 43	230 38	339 29	+ 4 50	h.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Aug. 11.	5918	222.466	590	0.341	79° 31'	229° 52'	338° 43'	+ 4 44	l.
	5919		590	0.306	84 1	235 5	343 56	+ 2 27	M.
	5920		590	0.361	87 6	233 49	342 40	+ 5 31	N.
	5921		590	0.299	79 31	232 31	341 22	+ 1 42	m.
	5922		590	0.376	88 36	233 23	342 14	+ 4 16	n.
	5923		591	0.337	149 59	226 1	334 52	- 21 53	O.
	5924		591	0.366	141 43	229 28	338 19	- 22 8	P.
	5925		591	0.412	143 15	234 17	343 8	- 23 33	Q.
	5926		591	0.389	149 10	235 49	344 40	- 21 20	R.
	5927		591	0.477	145 28	232 48	341 39	- 19 59	S.
	5928		591	0.451	146 13	230 10	339 1	- 20 36	o.
	5929		591	0.502	151 5	234 5	342 56	- 20 41	p.
	5930		591	0.489	148 30	233 54	342 45	- 21 27	q.
	5931		591	0.495	153 27	232 35	341 26	- 21 14	r.
	5932		591	0.508	154 33	234 25	343 16	- 21 30	s.
	5933	223.586	593	0.446	297 26	268 12	17 3	+ 8 28	T.
	5934		592	0.991	271 2	314 22	47 20	- 12 10	A.
	5935		592	0.964	268 42	316 38	49 36	- 12 13	a.
	5936		588	0.384	241 45	262 43	355 41	- 16 21	B.
	5937		588	0.417	239 9	261 1	353 59	- 17 50	b.
	5938		588	0.442	237 4	262 27	355 25	- 17 7	b ^o .
	5939		589	0.465	244 52	269 12	2 10	- 20 37	C.
	5940		589	0.476	246 24	266 44	359 42	- 18 56	D.
	5941		589	0.497	251 50	270 5	3 3	- 21 15	E.
	5942		589	0.508	248 41	271 14	4 12	- 17 2	c.
	5943		589	0.481	255 19	271 26	4 24	- 18 22	d.
	5944		589	0.469	253 37	265 28	358 26	- 18 9	e.
	5945		589	0.512	257 58	268 10	1 8	- 19 17	x.
	5946		590	0.102	335 27	251 39	344 37	+ 5 45	M.
	5947		590	0.129	341 29	248 33	341 31	+ 4 3	N.
	5948		590	0.157	26 25	252 29	345 27	+ 4 2	m.
	5949		590	0.166	37 48	249 41	342 39	+ 2 13	n.
	5950		591	0.276	221 37	245 53	338 51	- 19 4	O.
	5951		591	0.294	219 42	247 55	340 53	- 19 54	P.
	5952		591	0.312	202 21	246 44	339 42	- 20 12	Q.
	5953		591	0.387	189 56	248 50	341 48	- 21 17	R.
	5954		591	0.353	184 19	247 11	340 9	- 21 6	S.
	5955		591	0.360	195 42	244 28	337 26	- 18 41	o.
	5956		591	0.394	186 53	245 16	338 14	- 18 40	p.
	5957		591	0.401	177 26	249 19	342 17	- 20 14	q.
	5958		593	0.623	295 33	283 19	16 17	+ 8 17	T.
13.	5959	224.629	588	0.531	257 14	278 42	356 52	- 16 35	M.
	5960		588	0.572	255 37	273 37	351 47	- 16 56	N.
	5961		588	0.591	251 6	275 6	353 16	- 17 24	m.
	5962		588	0.608	249 12	277 4	355 14	- 17 41	n.
	5963		589	0.627	255 3	280 55	359 5	- 18 17	S.
	5964		589	0.634	261 3	282 44	0 54	- 20 2	s.
	5965		589	0.688	259 26	283 30	1 40	- 19 53	T.
	5966		589	0.676	257 31	280 13	358 23	- 20 24	t.
	5967		589	0.652	260 27	285 38	3 48	- 20 38	U.
	5968		589	0.679	262 22	287 16	5 26	- 20 55	u.
	5969		589	0.693	264 8	286 48	4 58	- 20 55	v.
	5970		591	0.384	198 31	260 5	338 15	- 18 30	A.
	5971		591	0.395	199 42	261 4	339 14	- 19 40	a.
	5972		591	0.401	207 26	262 7	340 17	- 18 14	B.
	5973		591	0.402	213 36	261 10	339 20	- 18 22	b.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1864. Aug. 13.	5974	224.629	591	0.411	223° 36'	259° 4'	337° 14'	-21° 17'	C.
	5975		591	0.418	229 26	260 30	338 40	-21 14	c.
	5976		591	0.433	226 42	264 20	342 30	-21 15	D.
	5977		591	0.422	231 31	262 45	340 55	-20 57	E.
	5978		591	0.429	228 8	262 45	340 55	-20 25	d.
	5979		591	0.439	234 26	263 12	341 22	-21 38	e.
	5980		590	0.305	292 45	259 14	337 24	+ 4 49	F.
	5981		590	0.331	297 46	259 5	337 15	+ 5 20	G.
	5982		590	0.267	335 35	261 26	339 36	+ 4 5	H.
	5983		590	0.347	298 38	263 9	341 19	+ 3 2	f.
	5984		590	0.357	306 35	262 44	340 54	+ 4 22	g.
	5985		593	0.762	309 25	298 25	16 35	+ 8 5	T.
15.	5986	226.476	590	0.653	295 32	290 19	342 17	+ 4 48	A.
	5987		590	0.661	296 8	290 29	342 27	+ 5 32	B.
	5988		590	0.679	297 29	289 33	341 31	+ 5 31	C.
	5989		590	0.694	298 50	292 25	344 23	+ 4 24	D.
	5990		590	0.576	302 12	291 36	343 34	+ 3 36	a.
	5991		590	0.602	308 41	291 22	343 20	+ 4 9	b.
	5992		590	0.609	306 16	288 47	340 45	+ 4 14	c.
	5993		591	0.604	252 11	285 31	337 29	-18 37	E.
	5994		591	0.612	262 26	288 21	340 19	-21 18	F.
	5995		591	0.637	260 41	289 16	341 14	-21 9	G.
	5996		591	0.655	259 57	284 49	336 47	-20 10	e.
	5997		591	0.645	258 40	287 27	339 25	-19 32	f.
	5998		591	0.666	264 23	286 5	338 3	-20 50	g.
	5999		591	0.755	276 10	285 21	337 19	-20 19	H.
	6000		591	0.762	275 34	286 6	338 4	-20 41	h.
	6001		588	0.834	269 51	303 5	355 3	-17 42	M.
	6002		588	0.846	269 9	304 48	356 46	-18 47	N.
	6003		588	0.851	271 54	298 7	350 5	-18 57	m.
	6004		589	0.874	267 11	307 10	359 8	-19 11	O.
	6005		589	0.882	269 42	308 7	0 5	-18 58	o.
	6006		589	0.909	270 58	306 49	358 47	-20 39	P.
	6007		589	0.889	272 34	309 4	1 2	-18 28	p.
	6008		589	0.895	273 31	314 36	6 34	-19 39	Q.
	6009		589	0.911	273 47	313 4	5 2	-19 28	q.
	6010		593	0.948	307 31	325 42	17 40	+ 7 14	T.
	6011		593	0.957	308 28	324 34	16 32	+ 8 10	t.
18.	6012	229.518	590	0.988	296 53	332 14	341 4	+ 5 23	A.
	6013		590	0.991	297 47	334 35	343 25	+ 4 42	a.
	6014		591	0.962	269 28	330 9	338 59	-19 16	B.
	6015		595	0.129	79 0	243 6	251 56	+ 3 35	C.
	6016		595	0.133	81 0	241 53	250 43	+ 2 7	c.
19.	6017	230.524	595	0.205	304 15	256 3	264 53	+ 3 13	A.
	6018		595	0.131	311 38	254 55	263 45	+ 5 40	a.
	6019		595	0.217	305 13	258 18	267 8	+ 4 3	a ⁰ .
20.	6020	231.496	595	0.414	294 40	273 12	282 2	+ 3 53	A.
	6021		595	0.355	290 21	272 47	281 37	+ 4 1	a.
	6022		595	0.428	291 55	269 21	278 11	+ 2 58	a ⁰ .
21.	6023	232.472	No spot visible.						
25.	6024	236.476							
26.	6025	237.546							
30.	6026	241.524							
	6027		596	0.193	312 8	269 48	108 20	+ 5 13	A.
	6028		596	0.185	324 59	266 22	104 54	+ 5 7	B.
	6029		596	0.167	331 40	267 22	105 54	+ 5 39	C.
	6029		596	0.156	355 24	268 46	107 18	+ 7 56	a.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Aug. 30.	6030	241.524	596	0.145	6° 26'	263° 52'	102° 24'	+ 6° 13'	b.
	6031		596	0.149	8 23	262 46	101 18	+ 7 43	c.
	6032		597	0.764	135 28	217 45	56 17	-21 3	D.
	6033		597	0.771	134 26	216 46	55 18	-22 33	d.
Sept. 1.	6034	243.465	596	0.583	304 24	296 40	107 40	+ 7 43	M.
	6035		596	0.512	306 29	294 32	105 32	+ 7 6	m.
	6036		596	0.517	307 4	292 25	103 25	+ 7 27	n.
	6037		597	0.489	160 49	248 56	59 56	-22 21	B.
	6038		597	0.483	161 14	249 12	60 12	-22 2	b.
3.	6039	245.486	596	0.892	298 37	323 51	106 11	+ 5 47	A.
	6040		596	0.834	301 25	321 28	103 48	+ 5 7	a.
	6041		597	0.407	223 52	278 12	60 32	-20 4	B.
	6042		597	0.405	224 13	277 6	59 26	-21 13	b.
	6043		599	0.898	100 46	201 35	343 55	+ 6 59	C.
	6044		599	0.900	101 17	202 17	344 37	+ 7 55	c.
5.	6045	247.490	597	0.654	259 37	305 13	59 7	-19 30	A.
	6046		597	0.662	258 3	304 29	58 23	-20 27	A ⁰ .
	6047		597	0.684	260 25	303 20	57 14	-20 35	a.
	6048		599	0.622	99 6	230 26	344 20	+ 7 29	B.
	6049		599	0.626	100 6	230 49	344 43	+ 7 56	b.
15.	6050	257.493	600	0.973	283 20	5 43	337 44	+ 5 4	A.
	6051		600	0.968	282 5	4 52	336 53	+ 6 30	a.
	6052		601	0.424	135 20	259 11	231 12	- 9 39	B.
	6053		601	0.433	134 31	255 50	227 51	- 7 40	C.
	6054		601	0.436	129 30	256 6	228 7	- 8 15	D.
	6055		601	0.448	132 20	258 32	230 33	- 7 28	E.
	6056		601	0.481	132 20	254 26	226 27	- 9 21	b.
	6057		601	0.476	132 45	255 15	227 16	-11 46	c.
	6058		601	0.467	129 24	256 26	228 27	-10 4	d.
	6059		601	0.492	128 8	254 27	226 28	-10 26	e.
17.	6060	259.458	601 _a	0.157	204 42	270 43	229 3	- 7 34	A.
	6061		601 _a	0.193	211 10	269 34	227 54	- 8 48	a.
	6062		602	0.824	115 39	227 59	186 19	- 5 10	B.
	6063		602	0.837	114 49	227 3	185 23	- 5 32	b.
19.	6064	261.528	601 _a	0.567	280 1	299 8	228 6	- 8 2	A ⁰ .
	6065		601 _a	0.532	282 45	298 37	227 35	- 8 55	a ⁰ .
	6066		602	0.476	121 54	258 33	187 31	- 5 20	B ⁰ .
	6067		602	0.491	122 9	256 18	185 16	- 6 43	b ⁰ .
20.	6068	262.458	601 _a	0.702	284 7	312 12	227 58	- 8 8	S.
	6069		601 _a	0.674	285 12	312 33	228 19	- 7 11	s.
	6070		602	0.266	132 8	271 52	187 38	- 5 18	T.
	6071		602	0.278	130 7	270 21	186 7	- 5 49	t.
21.	6072	263.416	602	0.094	192 33	285 33	187 44	- 5 52	M.
	6073		602	0.099	195 38	286 50	189 1	- 6 4	m.
22.	6074	264.482	602	0.287	281 46	299 29	186 33	- 5 45	A.
23.	6075	265.490	No spot visible.						
24.	6076	266.524	602 _a	0.867	276 21	343 11	191 17	- 8 43	A.
	6077		604	0.961	124 22	227 45	75 51	-15 55	B.
27.	6078	269.490	603	0.354	249 34	303 48	119 50	-12 24	A.
	6079		603	0.351	245 6	301 32	117 34	-12 47	a.
	6080		603	0.348	241 58	301 1	117 3	-13 14	a ⁰ .
	6081		604	0.577	139 7	259 17	75 19	-16 22	B.
	6082		604	0.573	139 1	259 46	75 48	-15 59	b.
28.	6083	270.661	603	0.555	267 9	318 49	118 14	-12 11	M.
	6084		603	0.537	269 22	319 39	119 4	-12 52	m.
	6085		604	0.372	166 58	276 14	75 39	-14 23	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864.									
Sept. 28.	6086	270.661	604	0.379	165° 57'	277° 22'	76° 47'	-16° 7'	a.
29.	6087	271.454	603	0.633	275 11	330 9	118 29	-11 33	A.
	6088		605	0.964	104 47	218 52	7 2	+ 3 43	B.
30.	6089	272.619	605	0.879	106 33	235 40	7 19	+ 2 25	A.
Oct. 1.	6090	273.552	605	0.722	104 49	249 19	7 44	+ 2 7	A ^o .
	6091		606	0.958	124 25	224 36	343 1	-14 50	B.
3.	6092	275.440	605	0.405	95 44	275 30	7 8	+ 3 48	A.
	6093		606	0.764	129 47	251 8	342 46	-15 51	B.
4.	6094	276.532	605	0.174	71 55	290 35	6 43	+ 3 3	a.
	6095		605 _a	0.366	211 18	301 2	17 10	-18 25	a ^o .
	6096		605 _a	0.384	199 17	299 4	15 12	-17 31	a ¹ .
	6097		606	0.588	138 6	266 18	342 26	-16 4	A.
5.	6098	277.538	605 _a	0.423	241 19	315 52	17 45	-18 20	M.
	6099		605 _a	0.388	228 40	314 41	16 34	-17 11	m.
	6100		606	0.444	147 5	281 23	343 36	-16 15	O.
6.	6101	278.462	605 _a	0.602	259 19	328 32	17 18	-17 58	A.
	6102		605 _a	0.534	252 42	328 40	17 26	-18 41	B.
	6103		606	0.295	179 43	293 29	342 15	-16 34	a.
7.	6104	279.528	605 _a	0.671	264 18	344 16	17 55	-18 7	A.
	6105		606	0.291	239 10	309 43	343 22	-16 26	B.
	6106		607	0.849	108 58	245 52	279 31	+ 7 37	C.
8.	6107	280.480	605 _a	0.812	273 40	356 52	17 0	-17 2	M.
	6108		606	0.438	263 6	323 12	343 20	-16 22	m.
	6109		607	0.692	103 58	261 36	281 44	+ 7 47	n.
	6110		607	0.743	104 26	257 21	277 29	+ 5 3	o.
	6111		607	0.769	106 22	259 49	279 57	+ 3 47	p.
10.	6112	282.458	606	0.774	281 14	350 17	342 22	-16 33	A.
	6113		607	0.229	88 30	290 32	282 37	+ 7 30	a.
	6114		607	0.354	95 37	285 45	277 50	+ 4 33	a ^o .
11.	6115	283.440	606	0.962	288 53	4 29	342 38	-16 28	M.
12.	6116	284.518	608	0.908	286 14	3 29	326 21	- 3 43	N.
15.	6117	287.462	609	0.362	259 23	329 7	250 13	-10 39	A.
	6118		609	0.384	257 3	325 4	246 10	- 9 15	B.
	6119		609	0.411	249 47	326 17	247 23	- 7 23	C.
	6120		609	0.399	252 29	328 1	249 7	- 8 40	a.
	6121		609	0.442	255 5	322 38	243 44	-10 42	b.
	6122		609	0.437	253 34	323 19	244 25	-11 18	c.
	6123		609	0.454	248 24	321 11	242 17	-12 47	D.
18.	6124	290.479	609	0.887	283 14	7 50	246 9	- 8 13	d.
19.	6125	291.476	610	0.811	129 9	268 29	132 39	-12 17	A.
21.	6126	293.472	610	0.708	133 59	297 24	133 16	-14 8	A.
	6127		610	0.711	133 0	299 39	135 31	-12 44	a.
	6128		610	0.749	134 2	296 55	132 47	-14 12	B.
	6129		610	0.754	134 29	295 7	130 59	-15 19	b.
22.	6130	294.465	610	0.248	187 32	314 5	135 51	-11 6	M.
	6131		610	0.257	185 2	309 9	130 55	-12 11	N.
	6132		610	0.263	174 40	312 47	134 33	-12 14	m.
	6133		610	0.304	169 30	310 11	131 57	-14 32	n.
	6134		610	0.287	178 0	308 42	130 28	-16 51	O.
	6135		610	0.312	168 13	308 18	130 4	-15 54	o.
	6136		611	0.874	129 6	261 0	82 46	-16 44	P.
	6137		611	0.880	130 1	261 23	83 9	-16 54	p.
	6138		612	0.905	128 20	248 49	70 35	-17 38	Q.
	6139		612	0.907	129 14	249 7	70 53	-17 0	q.
	6140		613	0.871	99 7	257 14	79 0	+ 8 9	R.
	6141		613	0.873	101 40	260 27	82 13	+ 9 27	r.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Oct. 24.	6142	296.538	610	0.398	259° 10'	342° 2'	134° 25'	-10° 52'	A.
	6143		610	0.421	264 36	339 31	131 54	- 9 27	B.
	6144		610	0.457	261 7	338 52	131 15	-11 3	a.
	6145		610	0.497	265 10	335 7	127 30	-12 47	b.
	6146		611	0.505	142 20	290 43	83 6	-16 57	C.
	6147		611	0.509	143 5	288 29	80 52	-16 37	c.
	6148		612	0.622	137 25	278 27	70 50	-17 30	D.
	6149		612	0.629	136 39	277 2	69 25	-17 15	d.
	6150		613	0.484	85 48	287 30	79 53	+ 8 17	E.
	6151		613	0.495	88 39	288 49	81 12	+ 8 29	F.
	6152		613	0.505	85 23	289 49	82 12	+ 9 51	G.
	6153		613	0.517	87 34	285 11	77 34	+ 7 24	g.
	6154		613	0.519	89 22	283 43	76 6	+ 6 2	f.
	28. 6155		611	0.497	264 17	346 15	82 31	-14 10	M.
	6156		611	0.502	265 47	346 58	83 14	-15 8	m.
31.	6157	300.493	612	0.437	258 24	337 46	74 2	-13 57	S.
	6158		612	0.440	249 29	336 5	72 21	-12 48	T.
	6159		612	0.402	253 7	333 17	69 33	-13 12	s.
	6160		612	0.395	247 29	335 59	72 15	-16 17	t.
	6161		612	0.423	250 47	335 46	72 2	-16 51	P.
	6162		612	0.389	251 57	334 45	71 1	-17 21	p.
	6163		612	0.436	249 14	333 49	70 5	-18 48	Q.
	6164		612	0.388	249 26	334 55	71 11	-17 35	q.
	6165		614	0.822	109 22	261 21	357 37	+ 4 17	R.
	6166		614	0.854	108 30	264 58	1 14	+ 3 43	r.
	6167		614	0.841	109 26	262 51	359 7	+ 3 38	r.
	6168		614	0.867	107 31	266 7	2 23	- 1 31	r.
	31. 6169		612	0.947	281 35	17 14	70 9	-16 38	A.
	6170		614	0.254	102 37	311 12	4 7	+ 3 29	B.
	6171		614	0.267	104 23	310 14	3 9	+ 2 49	C.
Nov. 3.	6172	303.549	614	0.289	106 42	309 16	2 11	+ 0 57	D.
	6173		614	0.302	107 43	307 26	0 21	- 1 47	E.
	6174		614	0.307	106 0	307 4	359 59	+ 1 22	b.
	6175		614	0.341	106 42	306 0	358 55	+ 0 50	c.
	6176		614	0.357	108 26	304 23	357 18	+ 1 42	d.
	6177		614	0.374	107 6	303 7	356 2	+ 3 18	e.
	6178		614	0.365	107 22	304 23	357 18	+ 3 42	f.
	6179		614	0.383	109 55	303 6	356 1	+ 4 7	g.
	6180		615	0.963	106 55	246 48	285 32	+ 3 22	T.
	6181		615	0.965	107 46	248 13	286 57	+ 3 38	t.
	6182		616	0.989	104 8	223 56	262 40	+ 6 19	H.
	6183	306.465	614	0.441	301 10	6 36	3 58	+ 3 49	M.
	6184		614	0.396	299 55	4 14	1 36	+ 4 37	M.
	6185		614	0.354	303 23	0 24	357 46	+ 4 49	A.
	6186		614	0.337	306 0	358 38	356 0	+ 2 8	a.
	6187		615	0.571	104 33	287 37	284 59	+ 4 17	B.
	6188		615	0.579	105 9	287 57	285 19	+ 4 56	b.
	6189		615	0.587	105 53	288 22	285 44	+ 3 55	C.
	6190		615	0.602	104 4	286 24	283 46	+ 4 33	c.
	6191		616	0.846	103 20	267 12	264 34	+ 5 15	D.
	6192		616	0.857	104 50	268 48	266 10	+ 6 1	E.
	6193		616	0.855	104 43	265 35	262 57	+ 6 11	d.
	6194		616	0.888	105 22	263 50	261 12	+ 4 9	e.
	6195		616	0.895	106 23	267 35	264 57	+ 5 58	e.
4.	6196	307.500	614	0.643	299 23	21 13	3 35	+ 3 36	A.
	6197		614	0.659	300 37	20 13	2 55	+ 2 29	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864 Nov. 4.	6198	307.500	614	0.667	299° 45'	19° 56'	2° 38'	+ 4° 17'	a.
	6199		614	0.695	302 6	16 20	359 2	+ 2 29	b.
	6200		615	0.387	101 7	304 44	287 26	+ 3 46	F.
	6201		615	0.389	101 17	303 46	286 28	+ 4 42	f.
	6202		615	0.405	98 41	304 44	287 26	+ 3 5	G.
	6203		615	0.419	98 42	301 1	283 43	+ 4 5	g.
	6204		615	0.424	97 28	301 43	284 25	+ 4 20	g ^l .
	6205		616	0.682	102 36	284 48	267 30	+ 7 55	M.
	6206		616	0.661	102 0	283 53	266 35	+ 6 22	m.
	6207		616	0.699	104 50	281 20	264 2	+ 5 46	N.
	6208		616	0.719	104 22	279 23	262 5	+ 6 37	n.
	6209		616	0.744	103 59	278 55	261 37	+ 3 4	O.
	6210		616	0.763	104 23	277 48	260 30	+ 5 33	o.
14.	6211	317.476	616	0.994	287 46	61 53	263 5	+ 6 9	A.
	6212		617	0.224	222 7	343 35	184 47	- 9 9	a.
	6213		618	0.897	123 8	284 7	125 19	-10 33	a ^o .
18.	6214	321.496	618	0.221	201 51	343 27	127 37	-11 12	A.
	6215		618	0.239	199 23	342 46	126 56	-12 31	B.
	6216		618	0.228	194 32	340 18	124 28	-10 22	C.
	6217		618	0.244	193 18	340 55	125 5	-10 23	D.
	6218		619	0.292	172 1	334 26	118 36	-13 6	a.
	6219		619	0.298	171 42	335 8	119 18	-14 13	b.
	6220		620	0.677	86 46	300 46	84 56	+12 20	c.
	6221		620	0.713	91 1	296 22	80 32	+ 9 32	d.
22.	6222	325.462	618	0.824	274 44	38 41	125 11	-10 12	B.
	6223		618	0.801	273 6	40 33	127 3	-11 17	b.
	6224		618	0.799	271 3	40 6	126 36	-11 37	C.
	6225		619	0.304	338 43	31 55	118 25	-14 38	M.
	6226		620	0.337	339 1	350 48	78 43	+16 0	N.
	6227		621	0.417	247 31	6 57	94 52	-14 56	D.
	6228		621	0.395	246 30	4 21	92 16	-12 36	E.
	6229		621	0.359	239 28	4 12	92 7	-11 31	d.
	6230		621	0.328	242 19	6 38	94 33	-11 49	e.
	6231		621	0.312	238 16	358 32	86 27	-12 21	f.
25.	6232	328.514	621	0.872	269 35	43 0	87 37	-10 36	A.
	6233		621	0.865	267 33	46 28	91 5	-11 45	B.
	6234		621	0.849	268 20	48 30	93 7	-11 58	C.
	6235		621	0.826	269 50	48 13	92 50	-11 6	D.
	6236		622	0.482	81 33	317 47	2 24	+14 9	a.
	6237		622	0.495	84 24	321 40	6 17	+12 22	b.
	6238		622	0.505	86 22	323 46	8 23	+16 51	c.
	6239		622	0.571	87 32	318 37	3 14	+11 58	d.
	6240		622	0.536	79 42	317 54	2 31	+12 14	e.
	6241		622	0.584	80 46	317 13	1 50	+12 34	f.
	6242		623	0.789	89 1	300 12	344 49	+13 4	E.
	6243		623	0.805	90 4	299 30	344 7	+11 43	F.
	6244		623	0.806	91 4	298 48	343 25	+12 38	G.
	6245		623	0.794	89 39	298 57	343 34	+12 57	H.
	6246		624	0.853	94 7	292 3	336 40	+ 9 51	S.
	6247		624	0.861	95 19	288 42	333 19	+11 41	s.
29.	6248	332.528	622	0.502	305 13	23 39	11 20	+ 9 33	A.
	6249		622	0.487	311 21	22 54	10 35	+ 9 39	B.
	6250		622	0.489	309 24	18 2	5 43	+10 45	C.
	6251		622	0.453	318 27	19 52	7 33	+12 43	a.
	6252		622	0.414	324 47	21 41	9 22	+14 15	b.
	6253		622	0.396	322 2	15 54	3 35	+12 38	c.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. Nov. 29.	6254	332.528	622	0.409	320 36	15 45	3 26	+12 22	D.
	6255		622	0.428	319 13	14 38	2 19	+16 46	d.
	6256		622	0.387	319 10	12 32	0 13	+14 8	d ¹ .
	6257		623	0.247	2 18	357 10	344 51	+11 5	M.
	6258		623	0.244	5 48	356 57	343 38	+12 12	N.
	6259		623	0.259	6 28	356 19	344 0	+13 48	n.
	6260		624	0.192	21 9	349 58	337 39	+ 9 49	S.
	6261		624	0.216	25 43	348 51	336 32	+11 24	s.
	6262		624	0.215	26 28	346 13	333 54	+11 3	T.
	6263		624	0.229	35 58	346 32	334 13	+10 42	t.
	6264		624	0.238	37 40	347 58	335 39	+12 35	q.
	6265		625	0.933	89 29	285 22	273 3	+ 7 22	Q.
	6266		625	0.928	93 20	286 45	274 26	+ 8 38	R.
	6267		625	0.944	94 4	285 6	272 47	+ 7 17	r.
	6268		626	0.953	106 55	284 30	272 11	- 4 49	P.
Dec. 1.	6269	334.454	622	0.802	301 16	47 5	7 28	+11 58	S.
	6270		622	0.811	300 26	43 48	4 11	+14 41	s.
	6271		622	0.826	298 55	47 53	8 16	+12 51	T.
	6272		622	0.833	299 44	45 1	5 24	+10 24	t.
	6273		622	0.845	298 16	43 22	3 45	+16 57	q.
	6274		622	0.714	301 2	41 54	2 17	+11 10	m.
	6275		622	0.756	302 15	39 54	0 17	+11 25	n.
	6276		622	0.744	302 42	45 55	6 18	+11 26	o.
	6277		622	0.779	304 6	44 41	5 4	+12 38	p.
	6278		622	0.783	305 50	44 12	4 35	+11 18	p ¹ .
	6279		623	0.506	308 11	24 5	344 28	+12 20	A.
	6280		623	0.517	309 44	23 44	344 7	+11 13	A ^o .
	6281		624	0.421	313 13	15 10	335 33	+10 27	B.
	6282		624	0.426	310 7	16 6	336 29	+11 22	b.
	6283		624	0.444	311 20	12 57	333 20	+12 13	C.
	6284		624	0.439	308 1	14 57	335 20	+12 59	c.
	6285		624	0.449	306 5	15 16	335 39	+10 2	d.
	6286	335.504	625	0.683	89 49	314 10	274 33	+ 7 56	M.
	6287		625	0.681	89 3	313 29	273 52	+ 8 42	N.
	6288		626	0.711	108 26	312 49	273 12	- 5 28	O.
2.	6289		622	0.867	303 15	60 34	6 3	+14 49	A.
	6290		622	0.911	299 18	57 45	3 14	+15 15	B.
	6291		622	0.888	301 52	59 6	4 35	+12 26	C.
	6292		622	0.922	298 0	54 35	0 4	+12 27	a.
	6293		622	0.936	302 14	57 41	3 10	+11 1	b.
	6294		622	0.940	297 53	55 57	1 26	+11 18	c.
	6295		622	0.948	297 59	59 9	4 38	+12 1	d.
	6296		623	0.704	304 29	37 50	343 19	+11 52	E.
	6297		623	0.698	305 44	39 13	344 42	+13 14	e.
	6298		624	0.633	304 32	26 55	332 24	+ 9 36	S.
	6299		624	0.616	305 55	30 45	336 14	+10 19	s.
	6300		624	0.595	304 25	29 57	335 26	+11 20	T.
	6301		624	0.588	301 55	31 10	336 39	+11 51	t.
	6302		625	0.487	84 47	328 43	274 12	+ 8 6	X.
	6303	338.468	625	0.491	85 13	327 16	272 45	+ 8 57	x.
	6304		626	0.502	109 0	327 53	273 22	- 5 3	y.
5.	6305		623	0.984	296 12	81 14	344 40	+12 19	A.
	6306		624	0.979	294 59	71 41	335 7	+10 18	B.
	6307		624	0.972	295 37	73 28	336 54	+12 57	C.
	6308		624	0.966	294 6	72 9	335 35	+11 16	b.
	6309		625	0.287	321 31	11 17	274 43	+ 8 38	D.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1864.									
Dec. 5.	6310	338.468	627	0.712	114 42	311 41	215 7	-11 45	E.
	6311		627	0.723	113 8	310 36	213 58	-12 7	e.
8.	6312	341.584	627	0.246	161 32	355 38	214 52	-11 30	A.
	6313		627	0.249	161 12	354 13	213 27	-11 32	a.
9.	6314	342.608	627a	0.417	279 22	23 30	268 13	-4 47	A.
	6315		627a	0.412	278 34	22 53	227 36	-3 59	a.
	6316		628	0.921	113 13	300 48	145 31	-2 6	b.
19.	6317	352.504	629	0.879	273 48	66 51	131 11	-7 38	A.
	6318		629	0.854	267 59	68 10	132 30	-5 34	B.
	6319		629	0.860	268 9	66 12	130 32	-5 42	C.
	6320		629	0.799	269 18	69 1	133 21	-4 3	D.
	6321		629	0.814	268 29	69 25	133 45	-6 43	a.
	6322		629	0.833	267 54	70 12	134 32	-6 5	b.
	6323		629	0.798	269 8	70 55	135 15	-6 31	c.
20.	6324	353.500	629	0.954	265 16	81 15	131 28	-5 40	A.
	6325		629	0.955	269 3	83 45	133 58	-5 50	B.
	6326		629	0.936	270 32	82 50	133 3	-4 38	a.
	6327		629	0.928	267 14	82 13	132 26	-6 28	b.
	6328		629	0.922	268 23	79 51	130 4	-4 56	c.
	6329		629	0.926	271 10	83 59	134 12	-4 28	d.
	6330		630	0.846	76 11	283 14	333 27	+18 15	M.
1865.	6331		631	0.987	83 24	295 53	347 6	+16 1	N.
Jan. 4.	6332	3.535	632	0.934	266 49	101 15	298 12	-2 21	A.
	6333		633	0.412	60 47	8 57	205 54	+11 34	a.
	6334		633	0.476	61 36	5 29	202 26	+12 55	b.
	6335		633	0.483	61 0	3 35	200 32	+12 14	c.
	6336		633	0.508	62 25	0 9	197 6	+13 1	d.
7.	6337	6.602	633	0.424	283 21	50 38	204 10	+10 44	M.
	6338		634	0.759	99 20	346 28	140 0	-12 24	N.
9.	6339	8.479	633	0.744	276 53	82 55	209 45	+10 4	M ^o .
	6340		634	0.429	115 24	12 49	139 39	-12 43	N ^o .
23.	6341	22.514	637	0.864	239 50	104 58	32 43	-21 27	P.
	6342		637	0.853	238 17	105 43	33 28	-22 49	Q.
	6343		637	0.769	238 56	95 6	22 51	-18 16	p.
	6344		637	0.778	237 11	96 13	23 58	-19 30	q.
	6345		638	0.308	249 27	65 1	352 46	-3 34	A.
	6346		638	0.292	244 43	58 8	345 53	-4 36	B.
	6347		638	0.281	240 16	62 48	350 33	-4 23	C.
	6348		638	0.239	242 1	63 24	351 9	-5 1	a.
	6349		638	0.224	243 53	57 1	344 46	-5 12	a ^o .
	6350		639	0.149	182 16	49 54	337 39	-6 35	M.
	6351		639	0.202	165 54	45 2	332 47	-7 57	m.
	6352		639	0.187	164 26	46 11	333 56	-7 38	n.
	6353		640	0.185	351 30	48 6	335 51	+10 48	S.
	6354		640	0.180	2 2	46 5	333 50	+9 25	s.
	6355		640	0.172	4 9	46 55	334 40	+11 5	s ^o .
	6356		641	0.607	82 44	11 53	299 38	+2 51	D.
	6357		641	0.611	83 52	11 21	299 6	+2 42	d.
	6358		642	0.695	103 8	6 46	294 31	-11 18	E.
	6359		642	0.784	104 26	1 13	288 58	-13 4	e.
	6360		642	0.806	105 15	0 1	287 46	-14 23	f.
	6361		643	0.946	78 0	339 41	267 26	+6 17	F.
Feb. 2.	6362	32.532	643	0.988	274 9	124 22	270 1	+6 12	A.
	6363		643a	0.743	259 45	107 53	253 32	+2 27	a.
	6364		645	0.566	214 54	84 14	229 53	-25 10	B.
	6365		645	0.561	210 34	82 59	228 38	-24 55	C.

TABLE III. (continued).

Date.	No.	Mean Tim of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Feb. 2.	6366	32.532	645	0.498	211° 36'	79° 14'	224° 53'	-23° 50'	D.
	6367		645	0.536	205 24	80 12	225 52	-23 44	E.
	6368		645	0.540	203 21	74 45	220 24	-24 32	b.
	6369		645	0.511	202 46	75 28	221 7	-25 30	c.
	6370		645	0.482	207 18	73 11	218 56	-25 48	d.
	6371		645	0.474	202 23	74 22	220 1	-23 44	e.
	6372		644	0.164	271 1	66 58	212 37	+ 2 56	F.
	6373		644	0.162	269 5	66 16	211 55	+ 3 33	f.
	6374		646	0.402	162 48	55 16	201 55	-22 21	G.
	6375		646	0.395	159 29	53 31	199 10	-21 52	g.
9.	6376	39.504	644	0.907	271 34	165 57	212 42	+ 3 19	M.
	6377		644	0.885	273 10	165 36	212 21	+ 4 7	m.
	6378		647 _a	0.282	6 29	63 6	109 51	+16 47	P.
	6379		648	0.368	34 23	52 15	99 0	+15 28	R.
	6380		648	0.375	37 56	50 29	97 14	+17 37	r.
	6381		649	0.264	141 11	52 38	99 23	-11 57	S.
	6382		649	0.265	139 54	51 18	98 3	-12 44	T.
	6383		649	0.272	135 39	51 57	98 42	-12 41	s.
	6384		649	0.287	132 20	49 3	95 48	-10 15	t.
15.	6385	45.605	647	0.436	287 14	93 49	54 2	+14 41	A.
	6386		647	0.459	285 51	97 39	57 52	+15 24	a.
	6387		647	0.491	283 4	101 10	61 23	+16 25	B.
	6388		647	0.512	283 4	104 8	64 21	+13 17	b.
	6389		649	0.398	218 29	89 40	49 53	-13 5	C.
	6390		649	0.382	212 34	90 5	50 18	-14 41	c.
	6391		649	0.428	217 3	87 14	47 27	-12 20	d.
17.	6392	47.514	647	0.902	264 29	135 45	68 53	+13 22	M.
	6393		649	0.865	231 38	130 19	63 27	-15 3	A.
	6394		649	0.863	230 18	129 47	62 55	-15 27	a.
25.	6395	55.434	650	0.908	236 30	144 33	325 21	- 9 7	A.
	6396		651	0.264	249 59	97 11	277 59	+ 3 49	B.
28.	6397	58.507	651 _a	0.811	243 19	138 5	275 18	+ 0 28	P
	6398		651 _a	0.822	244 59	140 31	277 44	- 3 43	p.
	6399		651 _a	0.846	245 31	141 19	278 32	- 7 25	A.
	6400		651 _a	0.854	247 54	142 7	279 20	- 5 17	a.
	6401		652	0.583	277 29	120 46	257 59	+14 22	M.
	6402		652	0.575	276 46	121 16	258 29	+13 53	m.
	6403		652	0.508	283 0	115 7	252 20	+16 52	N.
	6404		652	0.514	284 50	114 13	251 26	+16 9	n.
	6405		653	0.887	52 35	26 55	164 8	+13 42	O.
	6406		653	0.906	51 58	24 28	161 51	+12 57	o.
Mar. 1.	6407	59.546	651 _a	0.900	243 32	157 19	279 47	- 3 53	M.
	6408		651 _a	0.889	244 27	155 19	277 47	- 4 56	m.
	6409		652	0.754	268 29	133 23	255 51	+13 30	N.
	6410		652	0.749	269 34	133 48	256 16	+13 54	n.
	6411		652	0.673	271 56	131 19	252 47	+13 39	O.
	6412		652	0.670	271 37	133 57	256 25	+14 24	o.
	6413		653	0.871	55 48	42 54	165 22	+12 26	P.
	6414		653	0.904	54 0	40 53	163 21	+13 11	p.
3.	6415	61.616	652	0.972	259 45	161 16	254 22	+12 3	A.
	6416		652	0.914	262 19	162 52	255 58	+13 26	a.
	6417		653	0.508	43 3	61 29	154 35	+12 46	M.
	6418		653	0.519	43 43	60 50	153 56	+12 54	m.
	6419		653	0.522	45 9	61 46	154 52	+15 13	N.
	6420		653	0.597	46 27	53 14	146 20	+16 46	n.
8.	6421	66.465	653	0.624	265 53	133 17	157 37	+12 10	S.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Mar. 8.	6422	66.465	653	0.622	266° 42'	132° 31'	156° 20'	+12° 52'	s.
	6423		654	0.417	319 34	97 9	121 29	+22 54	T.
9.	6424	67.450	653	0.788	258 21	146 3	156 0	+12 27	A.
	6425		653	0.785	257 17	147 47	157 43	+12 2	a.
	6426		654	0.517	289 12	115 58	125 55	+19 0	B.
	6427		654	0.489	287 55	116 40	126 37	+20 38	b.
	6428		654	0.492	287 59	116 41	126 38	+20 47	b ^l .
	6429		655	0.467	59 25	68 5	78 2	+ 7 16	C.
	6430	67.479	653	0.791	259 3	146 18	155 38	+12 29	A.
	6431		653	0.789	256 55	148 9	157 29	+12 16	a.
	6432		654	0.519	288 42	116 48	126 8	+18 52	B.
	6433		654	0.492	288 16	117 20	126 40	+20 41	b.
	6434		654	0.495	287 30	117 19	126 39	+20 53	b ^l .
	6435		655 ^a	0.464	59 11	68 27	77 47	+ 7 14	C.
13.	6436	71.444	655	0.246	309 24	104 20	58 2	+13 22	A.
	6437		655	0.253	317 27	101 21	55 3	+14 56	B.
	6438		655	0.255	324 38	99 47	53 29	+13 21	C.
	6439		655	0.261	339 41	97 34	51 18	+15 1	a.
	6440		655	0.264	342 46	95 7	48 21	+16 58	b.
	6441		656	0.638	254 53	135 8	88 22	+ 7 27	D.
	6442		656	0.645	252 4	135 35	89 17	+ 6 2	c.
	6443		656	0.657	252 34	136 59	90 41	+ 7 42	d.
	6444		657	0.299	250 13	117 39	71 21	+ 1 16	P.
	6445		657	0.338	247 11	115 22	69 4	+ 2 21	p.
	6446		657	0.272	242 22	113 18	67 0	— 0 33	M.
	6447		657	0.211	245 47	110 43	64 25	— 1 13	m.
	6448		657	0.198	241 41	109 23	63 5	+ 1 11	n. ^o .
17.	6449	75.630	656	0.933	248 8	193 40	88 0	+ 7 44	A.
	6450		656	0.957	247 41	194 50	89 10	+ 7 4	a.
	6451		655	0.744	259 46	162 46	57 6	+14 13	B.
	6452		655	0.740	258 16	158 26	52 46	+14 3	b.
	6453		655	0.662	259 36	161 8	55 28	+13 59	C.
	6454		655	0.625	260 9	160 28	54 48	+15 26	c.
20.	6455	78.490	655	0.894	253 38	203 45	57 30	+14 49	A.
	6456		655	0.886	254 29	202 8	55 53	+13 12	a.
	6457	78.510	655	0.897	253 4	204 20	57 48	+14 45	A.
	6458		655	0.890	254 37	202 14	55 42	+13 17	a.
21.	6459	79.486	655	0.972	251 30	218 11	57 49	+14 4	M.
	6460	79.636	655	0.980	250 56	220 22	57 52	+14 0	M.
22.	6461	80.493	658	0.371	39 25	88 7	273 28	+10 22	A.
	6462		658	0.370	43 58	86 19	271 40	+11 13	B.
	6463		658	0.393	40 34	86 59	272 20	+12 30	C.
	6464		658	0.387	41 23	88 27	273 48	+11 53	a.
	6465		658	0.404	45 0	89 42	275 3	+ 9 57	a. ^o .
	6466		659	0.555	62 33	74 52	260 13	+ 3 48	D.
	6467		659	0.560	63 2	72 32	257 53	+ 3 38	E.
	6468		659	0.672	65 8	72 47	258 8	+ 3 42	F.
	6469		659	0.675	65 25	66 7	251 28	+ 4 28	b.
	6470		659	0.679	66 58	67 48	253 9	+ 3 19	c.
	6471		659	0.748	66 34	66 39	252 0	+ 2 8	d.
	6472		659	0.750	67 44	60 7	245 28	+ 2 21	e.
	6473		659	0.772	64 47	59 38	244 59	+ 2 5	f.
	6474		659	0.783	63 31	61 15	246 36	+ 2 58	G.
	6475		659	0.781	65 48	62 3	247 24	+ 2 13	g.
	6476		660	0.753	58 3	57 18	242 39	+10 12	M.
	6477		660	0.762	58 32	58 48	244 9	+10 29	m.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Mar. 22.	6478	80.493	660	0.794	56° 19'	55° 1'	249° 22'	+ 8° 20'	A°.
	6479		660	0.801	59 38	56 37	241 58	+ 8 5	a ¹ .
	6480		661	0.555	95 23	77 41	263 2	-13 52	P.
	6481		661	0.561	95 18	77 56	263 17	-13 13	p.
	6482		661	0.562	97 2	78 45	264 6	-14 12	Q.
	6483		661	0.574	98 47	78 27	263 48	-15 27	q.
	6484		661	0.569	107 2	78 23	263 44	-20 41	R.
	6485		661	0.573	108 53	79 8	264 29	-21 25	r.
23.	6486	81.479	662	0.891	57 25	49 24	220 46	+ 9 52	S.
	6487		662	0.897	58 7	47 42	219 4	+ 9 48	s.
24.	6488	82.476	662	0.751	54 52	63 54	221 7	+ 9 20	M.
	6489		662	0.762	53 20	61 2	218 15	+10 5	m.
	6490	82.518	662	0.746	54 29	64 53	221 30	+ 9 28	M.
	6491		662	0.757	53 10	61 34	218 11	+10 2	m.
27.	6492	85.607	663	0.783	42 55	65 35	178 24	+19 57	A.
	6493		663	0.791	43 14	62 44	175 33	+20 2	B.
	6494		663	0.795	42 39	64 21	177 10	+16 50	C.
	6495		663	0.810	45 8	62 29	175 18	+17 46	D.
	6496		663	0.807	44 23	62 10	174 59	+17 52	a.
	6497		663	0.831	44 23	60 26	173 15	+18 57	b.
	6498		663	0.836	44 46	61 3	173 52	+19 33	c.
	6499		663	0.849	45 2	59 28	172 17	+19 26	d.
	6500		663	0.844	46 47	59 17	172 6	+19 15	e.
	6501	85.624	663	0.780	42 6	66 8	178 42	+20 3	A.
	6502		663	0.788	43 3	62 49	175 23	+19 53	B.
	6503		663	0.792	42 10	64 27	177 1	+17 0	C.
	6504		663	0.808	45 25	63 4	175 38	+17 44	D.
	6505		663	0.805	44 41	61 41	174 15	+18 5	a.
	6506		663	0.824	44 27	60 59	173 33	+19 6	b.
	6507		663	0.831	44 49	61 20	173 54	+19 30	c.
	6508		663	0.844	45 34	59 26	172 0	+19 21	d.
	6509		663	0.839	46 13	59 16	171 50	+19 19	e.
28.	6510	86.482	663	0.622	35 5	71 39	172 3	+19 16	M.
	6511		663	0.643	37 36	76 53	177 17	+20 38	N.
	6512		663	0.641	36 51	77 48	178 12	+18 43	O.
	6513		663	0.657	35 14	77 12	177 36	+17 38	m.
	6514		663	0.666	36 31	76 30	176 54	+16 21	n.
	6515		663	0.692	38 14	71 21	171 45	+18 8	o.
	6516		663	0.688	35 59	71 33	171 57	+17 28	p.
	6517		663	0.711	39 59	71 36	172 0	+19 7	q.
	6518	86.588	663	0.619	35 48	72 58	171 52	+19 12	M.
	6519		663	0.639	37 0	78 36	177 30	+20 24	N.
	6520		663	0.635	36 2	79 5	177 59	+18 40	O.
	6521		663	0.650	35 26	79 10	178 4	+17 39	m.
	6522		663	0.662	36 31	78 5	176 59	+16 22	n.
	6523		663	0.690	38 9	73 8	172 2	+18 5	o.
	6524		663	0.684	36 17	73 22	172 16	+17 29	p.
	6525		663	0.707	39 37	73 21	172 15	+19 0	q.
30.	6526	88.462	663	0.384	358 13	107 31	179 50	+20 56	A.
	6527		663	0.389	3 21	106 56	179 15	+21 36	B.
	6528		663	0.382	1 7	103 11	175 30	+20 47	C.
	6529		663	0.414	359 28	100 55	173 14	+19 58	D.
	6530		663	0.427	0 26	101 6	173 25	+18 22	a.
	6531		663	0.379	7 21	102 48	175 7	+18 5	b.
	6532		663	0.395	5 5	99 47	172 6	+17 16	c.
	6533		663	0.411	8 34	98 14	170 33	+17 7	d.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1865.									
Mar. 30.	6534	88.462	663	0.452	12 42	99 25	171 44	+16 32	e.
	6535		663	0.457	14 25	99 19	171 38	+17 50	f.
	6536	88.478	663	0.383	359 55	107 32	179 37	+20 55	A.
	6537		663	0.388	3 58	106 49	178 54	+20 59	B.
	6538		663	0.380	1 15	103 47	175 52	+20 45	C.
	6539		663	0.414	359 56	100 29	172 34	+19 50	D.
	6540		663	0.425	1 49	102 0	174 5	+18 20	a.
	6541		663	0.377	6 22	103 34	175 39	+18 10	b.
	6542		663	0.393	5 39	100 13	172 18	+17 24	c.
	6543		663	0.407	8 47	99 59	172 4	+17 15	d.
	6544		663	0.450	12 48	98 44	170 49	+17 0	e.
	6545		663	0.455	14 57	99 27	171 32	+18 4	f.
31.	6546	89.479	663	0.375	325 14	119 44	177 37	+18 29	M.
	6547		663	0.379	327 59	121 5	178 58	+17 47	N.
	6548		663	0.370	340 55	117 39	175 32	+16 8	O.
	6549		663	0.363	328 26	116 8	174 1	+20 43	P.
	6550		663	0.350	330 13	115 33	173 26	+21 42	m.
	6551		663	0.351	336 42	114 55	172 48	+16 5	n.
	6552		663	0.361	339 16	113 46	171 39	+17 3	o.
	6553		663	0.346	346 39	113 43	171 36	+18 25	p.
	6554	89.490	663	0.377	325 56	119 27	177 11	+18 25	M.
	6555		663	0.382	328 46	121 13	178 57	+17 49	N.
	6556		663	0.374	341 28	117 32	175 16	+16 18	O.
	6557		663	0.365	328 56	116 29	174 13	+20 44	P.
	6558		663	0.354	330 13	115 44	173 28	+21 50	m.
	6559		663	0.356	336 31	114 21	172 5	+16 0	n.
	6560		663	0.362	339 11	113 18	171 2	+17 6	o.
Apr. 1.	6561		663	0.350	346 40	113 20	171 4	+18 40	p.
	6562	90.445	663	0.452	290 57	135 36	179 47	+20 34	S.
	6563		663	0.449	294 37	132 56	177 7	+18 43	T.
	6564		663	0.399	292 22	132 16	176 27	+17 10	U.
	6565		662	0.424	301 34	133 3	177 14	+16 34	s.
	6566		663	0.430	299 51	129 25	173 36	+19 37	t.
	6567		663	0.387	305 34	127 39	171 50	+19 18	u.
	6568		663	0.381	304 34	127 45	171 56	+18 14	v.
3.	6569	92.448	663	0.738	268 26	161 31	177 17	+18 33	A.
	6570		663	0.740	269 37	162 27	178 13	+18 5	a.
	6571		663	0.692	267 2	159 58	175 44	+19 6	B.
	6572	92.469	663	0.741	269 20	161 52	177 21	+18 36	A.
	6573		663	0.745	269 20	162 40	178 9	+18 2	a.
	6574		663	0.695	267 56	160 13	175 42	+18 54	B.
4.	6575	93.524	663	0.875	262 41	177 6	177 37	+18 26	M.
	6576		663	0.873	261 35	178 6	178 37	+17 54	m.
	6577	93.535	663	0.877	262 6	177 20	177 58	+18 29	M.
	6578		663	0.876	261 57	178 8	178 46	+17 52	m.
6.	6579	95.449	663	0.988	255 21	205 52	179 5	+18 20	A.
	6580		663	0.991	254 15	206 18	179 31	+17 55	a.
	6581	95.475	663	0.990	256 24	206 43	179 33	+18 31	A.
	6582		663	0.993	254 15	206 37	179 27	+17 59	a.
8.	6583	97.446	664	0.528	281 42	152 1	96 54	+17 8	S.
	6584		664	0.520	282 35	153 24	98 17	+18 34	s.
	6585		664	0.479	289 33	150 4	94 57	+20 15	t.
10.	6586	99.487	664	0.833	261 24	182 49	98 45	+19 11	S.
	6587		664	0.835	261 5	182 7	98 3	+20 27	s.
	6588		665	0.961	46 29	58 44	334 40	+18 27	t.
11.	6589	100.495	664	0.922	258 26	196 32	98 10	+19 37	Q.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1865. Apr. 11.	6590	100.495	665	0.875	44 17	73 24	335 2	+18 21	R.
	6591	100.510	664	0.925	258 0	196 2	97 27	+19 45	Q.
	6592		665	0.871	45 14	74 31	335 56	+18 55	R.
12.	6593	101.654	665	0.702	39 7	89 24	334 36	+19 0	M.
13.	6594	102.464	665	0.568	31 58	101 32	335 14	+18 9	A.
	6595		666	0.892	234 59	196 45	70 27	- 8 49	B.
	6596		666	0.881	233 13	194 37	68 19	- 8 4	b.
20.	6597	109.522	667	0.583	276 57	170 17	304 1	+16 45	A.
	6598		667	0.576	277 48	169 16	303 0	+16 44	B.
	6599		667	0.569	276 0	168 58	302 42	+17 24	a.
	6600		667	0.555	279 51	166 24	300 8	+18 0	b.
	6601		668	0.264	348 10	133 4	266 48	+14 13	C.
	6602		668	0.265	349 8	133 43	267 27	+14 1	D.
	6603		668	0.277	349 42	132 58	266 42	+15 41	c.
	6604		668	0.287	350 10	134 28	268 12	+16 11	d.
	6605	109.535	667	0.585	276 44	170 27	303 51	+16 40	A.
	6606		667	0.577	277 42	169 46	303 10	+16 42	B.
	6607		667	0.570	277 34	169 25	302 49	+17 28	a.
	6608		667	0.556	278 15	167 26	300 50	+17 55	b.
	6609		668	0.265	348 8	133 48	267 12	+14 12	C.
	6610		668	0.267	349 6	134 6	267 30	+14 9	D.
	6611		668	0.279	349 16	133 17	266 41	+15 47	c.
	6612		668	0.288	350 47	135 25	268 49	+16 20	d.
21.	6613	110.467	667	0.728	269 57	182 11	302 22	+17 53	S.
	6614		667	0.710	271 55	184 21	304 32	+16 4	T.
	6615		667	0.712	269 23	182 47	302 58	+16 49	s.
	6616		667	0.693	272 58	182 14	302 25	+16 0	t.
	6617		667	0.690	272 22	180 28	300 39	+17 54	u.
	6618		668	0.284	299 20	144 59	265 10	+14 5	A.
	6619		668	0.295	301 15	146 38	266 49	+14 32	B.
	6620		668	0.306	303 32	148 34	268 45	+14 18	a.
	6621		668	0.309	304 33	147 6	267 17	+15 32	b.
	6622		669	0.895	264 31	198 9	318 20	+13 31	C.
	6623		669	0.883	266 28	196 22	316 33	+14 41	c.
	6624	110.489	667	0.731	269 9	182 37	302 30	+17 56	S.
	6625		667	0.714	271 29	184 42	304 35	+16 6	T.
	6626		667	0.716	269 55	182 8	302 1	+16 53	s.
	6627		667	0.697	272 42	182 9	302 2	+15 49	t.
	6628		667	0.692	272 54	180 19	300 12	+17 55	u.
	6629		668	0.285	299 16	145 27	265 20	+14 5	A.
	6630		668	0.297	301 42	146 34	266 27	+14 27	B.
	6631		668	0.308	303 1	148 33	268 26	+14 17	a.
	6632		668	0.311	304 48	147 41	267 34	+15 32	b.
	6633		669	0.897	264 16	198 46	318 39	+13 39	C.
	6634		669	0.885	266 7	196 18	316 11	+14 40	c.
24.	6635	113.616	667	0.992	258 7	227 48	303 19	+15 3	A.
	6636		670	0.687	41 3	104 42	180 13	+13 34	a.
25.	6637	114.496	670	0.517	35 36	116 42	179 44	+15 9	M.
	6638		670	0.533	37 31	118 14	181 16	+16 26	m.
	6639		670	0.548	38 31	115 12	178 14	+16 9	n.
26.	6640	115.495	670	0.392	21 27	128 47	177 39	+13 55	A.
	6641		670	0.385	19 20	132 53	181 45	+14 29	a.
	6642		670	0.399	15 37	129 46	178 38	+16 50	B.
	6643		670	0.407	11 28	129 31	178 23	+17 36	b.
27.	6644	116.504	670	0.262	342 24	144 27	179 0	+14 56	a.
	6645		670	0.275	341 6	142 33	177 5	+14 6	b.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Apr. 27.	6646	116.504	670	0.281	339° 22'	142° 48'	177° 21'	+16° 23'	c.
	6647		671	0.223	137 46	138 54	173 27	- 8 9	A.
	6648		671	0.227	142 42	137 14	171 47	- 8 29	B.
	6649		671	0.231	139 13	135 47	170 20	- 8 14	C.
	6650		671	0.240	143 27	136 28	171 1	- 7 59	D.
May 2.	6651	121.608	674	0.800	262 51	206 35	168 44	+12 17	d.
	6652		672	0.654	77 37	111 17	73 26	- 7 31	P.
	6653		672	0.657	77 18	112 22	74 31	- 7 48	M.
	6654		672	0.663	79 16	110 17	72 26	- 8 2	m.
	6655		673	0.577	37 21	117 14	79 23	+14 8	S.
	6656		673	0.600	40 41	118 31	80 40	+15 0	s.
	6657		673	0.584	38 40	120 38	82 47	+16 51	T.
	6658		673	0.612	41 5	119 37	81 46	+14 15	t.
3.	6659	122.501	672	0.488	82 5	122 48	72 17	- 7 2	A.
	6660		673	0.431	24 25	132 8	81 37	+17 19	B.
	6661		673	0.454	37 21	129 48	79 17	+15 59	C.
	6662		673	0.472	30 22	131 51	81 20	+16 42	b.
	6663		673	0.438	29 15	126 33	76 2	+16 35	c.
	6664		673	0.487	38 35	124 31	74 0	+14 32	d.
5.	6665	124.538	672	0.217	175 36	153 11	73 47	- 8 12	M.
	6666		673	0.231	292 56	162 19	82 55	+13 29	P.
	6667		673	0.240	299 17	159 3	79 39	+13 18	Q.
	6668		673	0.307	311 57	158 1	78 37	+15 18	R.
	6669		673	0.287	309 55	160 41	81 17	+15 58	p.
	6670		673	0.343	314 37	156 43	77 19	+16 3	q.
	6671		675	0.887	71 57	93 44	14 20	- 4 50	r.
	6672		675	0.890	72 37	92 33	13 9	- 5 56	s.
	6673		675	0.892	73 0	89 0	10 0	- 5 46	t.
	6674		675	0.877	69 31	96 0	16 36	- 5 15	A.
	6675		676	0.981	71 18	83 7	3 43	+ 1 13	B.
6.	6676	125.669	673	0.407	271 19	172 33	77 6	+15 16	A.
	6677		673	0.423	272 6	176 13	80 46	+16 33	a.
	6678		675	0.658	66 10	110 30	15 3	- 4 6	B.
	6679		675	0.693	68 17	106 25	10 58	- 5 56	C.
	6680		675	0.714	70 18	106 28	11 1	- 3 59	D.
	6681		675	0.701	71 42	110 18	14 51	- 5 41	b.
	6682		675	0.688	73 43	109 16	13 49	- 5 8	c.
	6683		675	0.669	72 43	111 15	15 48	- 3 17	d.
	6684		675	0.732	69 44	112 18	16 51	- 5 35	e.
	6685		676	0.857	70 37	98 44	3 17	- 0 7	E.
8.	6686	127.491	675	0.292	74 54	135 50	14 33	- 4 42	M.
	6687		675	0.316	76 20	137 49	16 32	- 5 18	m.
	6688		675	0.348	76 21	132 52	11 35	- 5 36	m ^l .
	6689		676	0.517	69 12	124 31	3 14	+ 0 43	N.
9.	6690	128.591	675	0.054	168 37	152 10	15 16	- 3 30	A.
	6691		675	0.089	159 23	150 55	14 1	- 5 15	a.
	6692		675	0.112	154 24	148 37	11 43	- 5 17	a ^o .
	6693		676	0.293	77 24	140 35	3 41	- 0 24	B.
	6694		676	0.295	77 10	139 57	3 3	+ 0 20	b.
	6695		677	0.672	43 48	115 50	338 56	+17 16	C.
	6696		677	0.695	52 49	112 14	335 20	+16 48	D.
	6697		677	0.702	48 18	109 1	332 7	+15 55	c.
	6698		677	0.708	54 7	108 54	332 0	+14 29	d.
12.	6699	131.651	678	0.491	251 6	184 5	3 47	- 2 0	A.
	6700		678	0.470	250 7	183 41	3 23	- 3 18	A ^o .
	6701		678	0.463	246 24	182 42	2 24	- 4 25	a.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. May 12.	6702	131.651	678	0.429	240° 40'	179° 36'	359° 18'	— 4° 4'	a ^o .
	6703		678	0.444	242 39	181 16	0 58	— 4 0	B.
	6704		678	0.476	242 40	178 39	358 21	— 6 40	b.
	6705		678	0.483	248 24	183 4	2 46	— 5 47	C.
	6706		678	0.487	249 39	183 14	2 56	— 7 14	c.
	6707		678	0.424	239 55	178 54	358 36	— 8 53	c ^l .
	6708		679	0.273	281 56	170 14	349 56	+ 6 56	X.
	6709		679	0.259	283 48	169 19	349 1	+ 7 3	x.
13.	6710	132.660	678	0.663	244 52	198 35	3 58	— 5 45	A.
	6711		678	0.612	239 45	196 15	1 38	— 5 46	B.
	6712		678	0.604	242 37	197 51	3 14	— 5 56	C.
	6713		678	0.657	240 20	198 3	3 26	— 6 3	D.
	6714		678	0.660	241 26	194 16	359 39	— 6 12	E.
	6715		678	0.639	241 1	194 56	0 19	— 5 34	a.
	6716		678	0.623	240 53	195 22	0 45	— 7 47	b.
	6717		678	0.636	241 53	195 43	1 6	— 8 54	c.
	6718		678	0.598	239 26	193 59	359 22	— 8 35	d.
	6719		679	0.408	265 20	183 39	349 2	+ 5 33	F.
	6720		679	0.427	266 12	182 29	347 52	+ 5 26	G.
	6721		679	0.420	266 29	180 40	346 3	+ 6 22	e.
	6722		679	0.419	265 1	179 22	344 45	+ 7 27	f.
	6723		679	0.431	267 18	181 2	346 25	+ 7 13	g.
18.	6724	137.528	680	0.864	269 50	229 28	325 49	+10 16	A.
	6725		680	0.831	267 57	227 48	324 9	+11 13	B.
	6726		680	0.822	268 17	227 10	323 31	+11 9	a.
	6727		680	0.855	269 45	226 29	322 50	+10 9	b.
	6728		680	0.820	267 0	226 56	323 17	+ 8 19	c.
19.	6729	138.505	680	0.942	266 28	240 2	322 31	+10 59	M.
	6730		680	0.937	265 48	242 0	324 29	+11 2	N.
	6731		680	0.921	265 17	241 38	324 7	+11 33	O.
	6732		681	0.628	260 34	202 52	285 21	+ 9 36	A.
	6733		681	0.612	261 49	201 10	283 39	+ 8 35	a.
	6734		681	0.579	260 9	199 34	282 3	+ 8 16	B.
	6735		681	0.562	261 52	197 53	280 23	+ 7 37	b.
22.	6736	141.503	681	0.960	255 12	242 6	282 3	+ 8 6	M.
	6737		681	0.991	256 20	240 46	280 43	+ 7 50	m.
23.	6738	142.655	No spots visible.						
24.	6739	143.513							
25.	6740	144.482	682	0.982	80 56	87 35	85 17	— 9 59	P.
	6741		683	0.988	61 47	90 57	88 39	+10 24	Q.
26.	6742	145.489	682	0.941	82 21	100 51	84 16	—10 59	P.
	6743		682	0.943	81 4	100 32	83 57	—10 54	p.
	6744		682	0.957	83 25	102 29	85 54	—11 44	q.
	6745		683	0.944	62 47	105 10	88 35	+ 9 51	R.
	6746		683	0.942	62 26	103 47	87 12	+10 59	r.
27.	6747	146.462	682	0.843	81 9	118 57	88 34	— 9 54	A.
	6748		682	0.848	82 17	115 54	85 31	—11 23	a.
	6749		682	0.859	82 56	117 40	87 17	—10 13	B.
	6750		682	0.937	81 11	111 17	80 54	—11 8	b.
	6751		683	0.842	59 24	118 44	88 21	+10 13	C.
	6752		683	0.846	60 38	117 28	87 5	+ 9 35	c.
29.	6753	148.647	682	0.490	91 39	144 55	83 32	—10 3	M.
	6754		682	0.497	90 51	148 28	87 5	—11 6	m.
	6755		682	0.523	90 4	146 55	85 32	— 9 20	n.
	6756		682	0.506	91 0	144 32	83 9	—11 26	o.
	6757		682	0.519	91 18	145 52	84 29	—10 55	p.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865.									
May 29.	6758	148.647	682	0.533	93 30	147 10	85 47	-10 58	q.
	6759		683	0.488	54 53	150 59	89 36	+10 7	R.
	6760		683	0.491	55 0	149 36	88 13	+ 8 19	r.
30.	6761	149.510	682	0.337	104 32	160 0	86 24	- 9 34	S.
	6762		682	0.347	101 37	160 46	87 10	-11 41	T.
	6763		682	0.371	104 25	159 29	85 53	-10 40	s.
	6764		682	0.359	106 51	157 14	83 38	-11 38	t.
	6765		682	0.388	104 27	157 30	83 54	-11 46	a.
	6766		683	0.323	41 35	161 54	88 18	+ 9 45	B.
	6767		683	0.330	41 10	160 42	87 6	+ 9 8	b.
31.	6768	150.683	682	0.192	169 59	174 22	84 7	- 9 23	A.
	6769		682	0.190	168 22	175 56	85 41	-10 42	a.
	6770		682	0.206	169 7	173 20	83 5	- 9 7	B.
	6771		682	0.213	167 53	172 51	82 36	-10 38	b.
	6772		683	0.187	347 5	178 25	88 10	+10 21	C.
	6773		683	0.192	346 9	177 26	87 11	+ 9 22	c.
	6774		684	0.953	77 52	107 23	17 8	- 5 14	M.
	6775		684	0.950	78 22	105 19	15 4	- 3 16	m.
June 5.	6776	155.478	682	0.895	241 36	173 12	14 56	- 4 8	P.
	6777		682	0.906	244 34	241 39	83 23	-10 40	p.
	6778		682	0.904	242 25	239 54	81 38	- 9 53	Q.
	6779		682	0.917	246 32	243 22	85 6	-11 13	R.
	6780		682	0.922	244 19	245 14	86 58	-10 5	q.
	6781		682	0.924	247 49	243 37	85 21	-11 10	r.
	6782		684	0.109	139 49	176 50	18 34	- 3 19	S.
	6783		684	0.129	131 8	173 39	15 23	- 5 37	s.
	6784		684	0.157	124 55	172 26	14 10	- 4 34	t.
6.	6785	156.533	682	0.973	243 16	259 4	85 50	-10 51	A.
	6786		682	0.974	245 21	254 7	80 53	-11 35	a.
	6787		686	0.980	68 47	108 57	295 43	+ 3 12	M.
	6788		686	0.978	68 13	114 1	300 47	+ 5 45	m.
7.	6789	157.619	686	0.907	69 46	126 9	297 31	+ 6 40	A.
	6790		686	0.900	68 33	130 22	301 44	+ 4 27	B.
	6791		686	0.862	67 53	129 14	300 36	+ 3 41	a.
	6792		686	0.844	66 34	124 37	295 59	+ 5 57	b.
	6793		687	0.444	253 41	206 19	17 41	- 7 41	C.
	6794		687	0.447	254 28	207 21	18 43	- 7 14	c.
8.	6795	158.543	686	0.705	68 36	134 48	293 3	+ 6 14	D.
	6796		686	0.771	69 57	141 3	299 18	+ 5 39	E.
	6797		686	0.753	70 53	137 36	295 51	+ 6 47	F.
	6798		686	0.722	69 26	138 20	296 35	+ 5 20	d.
	6799		686	0.794	70 51	135 49	294 4	+ 4 54	e.
	6800		686	0.760	72 32	141 34	299 49	+ 7 43	f.
	6801		686	0.802	74 28	136 7	294 22	+ 8 36	g.
	6802		687	0.625	249 22	219 14	17 29	- 8 9	H.
9.	6803	159.473	686	0.521	67 51	149 5	294 9	+ 5 27	A.
	6804		686	0.536	65 46	154 41	299 45	+ 6 12	B.
	6805		686	0.628	66 15	148 14	293 18	+ 7 14	a.
	6806		686	0.579	67 30	153 52	298 56	+ 7 11	b.
	6807		686	0.637	65 32	150 39	295 43	+ 7 38	c.
	6808		687	0.801	251 51	233 37	18 41	- 7 3	D.
12.	6809	162.515	686	0.107	281 26	199 44	301 39	+ 4 53	M.
	6810		686	0.240	312 45	192 9	294 4	+ 4 7	m.
	6811		686	0.117	292 29	198 42	300 37	+ 5 36	N.
	6812		686	0.129	328 23	197 8	299 3	+ 4 54	n.
	6813		686	0.179	329 32	192 27	294 22	+ 6 22	o.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1864. June 12.	6814	162.515	686	0.223	330 51	191 24	293 19	+ 6 46	p.
	6815		686	0.189	317 29	191 21	293 16	+ 7 18	q.
	6816		686	0.242	295 11	190 40	292 35	+ 7 38	r.
	6817		688	0.167	154 25	184 59	286 54	- 5 29	S.
13.	6818	163.476	686	0.295	282 18	206 19	294 36	+ 5 21	A.
	6819		686	0.299	275 31	209 58	298 15	+ 6 4	a.
	6820		686	0.407	278 40	207 33	295 50	+ 7 37	B.
	6821		686	0.359	280 44	210 48	299 5	+ 7 10	b.
	6822		686	0.443	271 16	212 21	300 38	+ 7 33	c.
14.	6823	164.519	686	0.612	269 19	220 51	294 20	+ 7 58	M.
	6824		686	0.599	267 36	225 31	299 0	+ 6 39	A.
	6825		686	0.547	269 24	221 22	294 51	+ 5 16	a.
	6826		686	0.572	268 7	222 13	295 42	+ 7 50	B.
	6827		686	0.511	269 44	227 45	301 14	+ 7 18	b.
16.	6828	166.648	No spots visible.						
23.	6829	173.513	689	0.968	95 49	124 44	70 39	- 4 52	M.
July 3.	6830	183.515	No spots visible.						
4.	6831	184.546	690	0.982	88 53	128 54	278 19	- 5 40	S.
5.	6832	185.640	690	0.921	93 14	145 24	279 18	- 6 6	S ⁰ .
7.	6833	187.521	690	0.643	97 14	171 31	278 44	- 6 45	S ¹ .
	6834		691	0.497	83 0	186 32	293 45	+ 3 8	A.
	6835		691	0.533	78 16	185 5	292 18	+ 4 50	a.
10.	6836	190.512	690	0.137	168 1	214 29	279 17	- 5 55	M.
	6837		691	0.197	281 47	228 7	292 55	+ 3 16	A.
	6838		691	0.212	288 0	227 29	292 17	+ 4 38	a.
	6839		691	0.240	292 36	224 45	289 33	+ 6 45	B.
	6840		692	0.792	101 17	165 28	230 16	- 7 16	b.
11.	6841	191.644	690	0.302	249 3	231 44	280 28	- 6 8	A.
	6842		692	0.576	104 12	180 29	229 13	- 6 24	a.
12.	6843	192.694	690	0.498	263 58	245 58	279 49	- 5 0	M.
	6844		691	0.627	282 46	258 54	292 45	+ 4 40	A.
	6845		691	0.658	282 32	259 30	293 21	+ 5 38	a.
	6846		692	0.404	117 40	197 6	230 57	- 7 48	B.
14.	6847	194.544	690	0.814	267 3	271 39	279 15	- 6 3	A.
	6848		692	0.190	207 24	221 32	229 8	- 7 22	a.
15.	6849	195.569	692	0.357	246 10	237 34	230 38	- 7 48	B.
20.	6850	200.458	693	0.346	149 56	213 24	137 7	-16 24	M.
	6851		693	0.377	145 2	208 26	132 9	-17 23	N.
	6852		693	0.406	142 30	207 35	131 18	-16 28	m.
	6853		693	0.419	139 59	205 56	129 39	-17 49	n.
26.	6854	206.522	694	0.430	85 29	201 42	39 24	+ 5 44	S.
	6855		694	0.491	86 51	203 16	40 58	+ 5 27	s.
27.	6856	207.506	694	0.238	76 32	217 13	40 58	+ 4 25	S ⁰ .
	6857		694	0.243	75 45	215 27	39 12	+ 5 30	s ¹ .
28.	6858	208.545	694	0.098	358 2	232 39	41 39	+ 4 53	A.
	6859		694	0.132	0 4	229 23	38 23	+ 6 20	B.
	6860		694	0.119	3 21	231 42	40 42	+ 5 34	a.
	6861		694	0.144	4 39	228 56	37 56	+ 7 30	b.
29.	6862	209.624	694	0.386	291 57	246 53	40 25	+ 7 37	A.
	6863		694	0.395	296 59	247 52	41 34	+ 7 22	a.
	6864		694	0.402	299 2	244 0	37 42	+ 8 36	a ⁰ .
	6865		695	0.238	71 43	220 23	14 5	+ 5 47	B.
	6866		695	0.243	71 48	219 37	13 19	+ 5 7	b.
	6867		695	0.280	72 3	217 32	11 14	+ 7 44	b ⁰ .
	6868		696	0.283	106 57	216 32	10 14	- 3 58	C.
	6869		696	0.349	97 3	212 11	5 53	- 1 18	c.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Aug. 3.	6870	214.516	695	0.779	279° 9'	290° 12'	14° 31'	+ 5° 15'	M.
	6871		695	0.785	279 23	289 24	13 43	+ 7 3	m.
	6872		695	0.799	282 33	285 56	10 15	+ 6 34	N.
	6873		695	0.802	280 29	287 18	11 37	+ 4 6	n.
	6874		696	0.789	273 31	284 2	8 21	- 4 34	A.
	6875		696	0.749	272 19	286 22	10 41	- 3 26	a.
	6876		696	0.824	273 35	284 53	9 12	+ 0 3	b.
	6877		697	0.766	290 57	304 38	28 57	+ 11 18	B.
	6878		697	0.777	293 4	300 57	25 16	+ 11 47	C.
	6879		697	0.823	294 13	298 18	22 37	+ 14 29	D.
	6880		697	0.792	297 29	297 8	21 27	+ 15 30	E.
	6881		697	0.849	296 6	294 24	18 43	+ 13 51	b.
	6882		697	0.855	292 34	295 44	20 3	+ 14 20	c.
	6883		697	0.861	291 22	295 59	20 18	+ 12 21	d.
	6884		698	0.846	95 36	175 33	259 52	+ 5 17	F.
7.	6885	218.572	698	0.102	88 17	235 4	261 51	+ 5 25	M.
	6886		698	0.147	85 46	230 47	257 34	+ 3 40	N.
	6887		698	0.129	87 54	231 29	258 16	+ 3 33	O.
	6888		698	0.187	83 25	234 37	261 24	+ 4 9	m.
	6889		698	0.206	79 35	229 13	266 0	+ 6 7	n.
	6890		699	0.595	117 55	205 15	232 2	- 8 55	o.
	6891		699	0.613	115 21	205 11	231 58	- 9 40	p.
	6892		700	0.990	90 57	158 49	185 36	+ 5 4	Q.
	6893		700	0.987	91 27	156 13	183 0	+ 5 14	q.
9.	6894	220.439	698	0.358	290 22	259 6	259 24	+ 3 30	A.
	6895		698	0.347	294 43	261 11	261 29	+ 3 17	a.
	6896		699	0.282	146 19	231 28	231 46	- 9 51	B.
	6897		700	0.820	92 35	185 20	185 38	+ 6 41	C.
	6898		700	0.867	91 6	186 30	186 58	+ 7 44	c.
10.	6899	221.606	699	0.223	205 32	248 31	232 16	- 9 46	A ^o .
	6900		700	0.614	91 4	201 55	185 40	+ 5 22	B.
	6901		700	0.682	92 7	203 27	187 12	+ 5 20	b.
	6902		700	0.679	91 5	202 1	185 46	+ 6 14	b ^o .
12.	6903	223.429	700	0.288	85 23	229 37	187 30	+ 5 49	M.
	6904		700	0.319	83 55	227 13	185 6	+ 6 49	N.
	6905		700	0.331	81 22	226 45	184 38	+ 7 50	m.
14.	6906	225.495	700	0.196	310 39	254 42	183 16	+ 7 28	M ^o .
	6907		700	0.240	329 21	256 34	185 8	+ 6 30	N ^o .
	6908		701	0.972	115 26	170 49	99 23	- 21 59	A.
16.	6909	227.490	701	0.812	123 52	196 30	96 47	- 20 12	A ^o .
	6910		701	0.851	121 41	197 32	97 49	- 20 51	a.
17.	6911	228.485	701	0.640	129 11	212 54	99 4	- 21 52	A.
	6912		701	0.708	126 25	212 18	98 28	- 21 35	a.
	6913		702	0.990	117 51	173 41	59 51	- 19 15	B.
	6914		702	0.981	116 40	174 22	60 32	- 22 33	b.
	6915		702	0.964	115 59	174 53	61 3	- 21 7	c.
18.	6916	229.472	701	0.512	139 19	227 31	99 41	- 21 31	A.
	6917		701	0.569	135 11	222 17	94 27	- 21 31	a.
	6918		702	0.870	121 0	193 17	65 27	- 20 53	B.
	6919		702	0.902	119 53	189 14	61 24	- 21 35	b.
	6920		702	0.921	117 25	186 2	58 12	- 20 36	c.
21.	6921	232.667	703	0.859	99 39	192 53	19 44	+ 4 5	D.
	6922		703	0.876	94 28	190 33	17 24	+ 3 23	d.
	6923		703	0.897	96 7	193 13	20 4	+ 3 40	e.
	6924		703	0.891	95 10	191 9	18 0	+ 4 50	F.
	6925		703	0.906	96 9	193 52	20 43	+ 4 56	f.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Aug. 21.	6926	232.667	703	0.922	94 50	192 50	19 41	+ 3 38	g.
22.	6927	233.626	703	0.704	98 38	208 4	21 19	+ 5 27	M.
	6928		703	0.772	98 11	199 58	13 13	+ 6 4	N.
	6929		703	0.763	97 39	201 0	14 15	+ 4 10	O.
	6930		703	0.800	96 15	203 45	17 0	+ 7 43	P.
	6931		703	0.755	97 41	205 45	19 0	+ 6 40	m.
	6932		703	0.731	96 29	208 7	21 22	+ 8 15	n.
	6933		703	0.813	96 22	207 4	20 19	+ 3 21	o.
24.	6934	235.612	703	0.367	91 31	230 16	15 21	+ 4 23	A.
	6935		703	0.372	92 57	231 40	16 45	+ 4 6	B.
	6936		703	0.411	97 53	235 9	20 14	+ 5 10	C.
	6937		703	0.395	95 36	236 31	21 36	+ 6 16	D.
	6938		703	0.452	95 28	229 10	14 15	+ 8 58	a.
	6039		703	0.463	96 31	228 19	13 24	+ 7 30	b.
	6940		703	0.414	95 20	236 58	22 3	+ 6 5	c.
	6941		703	0.399	97 6	232 20	17 25	+ 5 11	d.
	6942		703	0.435	95 33	233 56	19 1	+ 4 10	e.
	6943		703	0.470	98 36	235 12	20 17	+ 3 35	f.
26.	6944	237.546	703	0.087	328 17	263 47	21 26	+ 4 27	M.
	6945		703	0.091	334 42	264 50	22 29	+ 3 2	N.
	6946		703	0.088	355 56	258 56	16 35	+ 3 3	O.
	6947		703	0.102	347 59	262 31	20 10	+ 4 15	P.
	6948		703	0.154	359 26	256 59	14 38	+ 3 1	Q.
	6949		703	0.133	13 4	257 7	14 46	+ 6 52	R.
	6950		703	0.141	1 54	255 3	12 42	+ 5 27	m.
	6951		703	0.150	47 20	261 36	19 15	+ 4 40	n.
	6952		703	0.160	50 40	259 57	17 36	+ 4 20	o.
	6953		703	0.123	26 19	256 35	14 14	+ 5 51	p.
	6954		703	0.129	9 48	257 0	14 39	+ 8 38	q.
	6955		703	0.162	55 23	255 33	13 12	+ 7 49	r.
29.	6956	240.426	703	0.707	299 47	297 55	14 43	+ 4 0	S.
	6957		703	0.692	295 34	299 25	16 13	+ 5 46	s.
	6958		703	0.695	294 2	304 53	21 41	+ 6 15	T.
	6959		703	0.611	293 13	303 44	20 32	+ 8 40	t.
	6960		703	0.649	293 4	301 13	18 1	+ 5 47	U.
	6961		703	0.671	296 45	300 43	17 31	+ 5 32	Z.
	6962		703	0.602	293 55	297 47	14 35	+ 5 54	u.
	6963		704	0.607	111 6	223 33	300 21	- 2 19	a.
	6964		704	0.615	112 18	220 16	297 4	- 3 33	b.
	6965		704	0.660	109 37	221 46	298 34	- 3 29	c.
30.	6966	241.462	703	0.862	298 11	314 31	16 37	+ 7 10	M.
	6967		703	0.870	297 22	317 28	19 34	+ 3 35	m.
	6968		703	0.881	296 48	318 59	21 5	+ 5 49	n.
	6969		704	0.408	114 57	237 29	299 35	- 3 19	A.
	6970		704	0.424	110 27	237 58	300 4	- 2 17	B.
	6971		704	0.472	111 38	239 30	301 36	- 1 42	C.
	6972		704	0.460	109 26	234 53	296 59	- 2 5	a.
	6973		704	0.491	109 32	233 18	295 24	- 4 18	b.
Sept. 1.	6974	243.476	703	0.970	297 15	344 47	18 19	+ 3 55	A.
	6975		703	0.972	299 21	341 5	14 37	+ 6 23	a.
	6976		704	0.008	125 31	263 33	297 5	- 1 57	B.
	6977		704	0.012	184 26	266 23	299 55	- 2 33	C.
	6978		704	0.088	237 20	265 0	298 32	- 1 15	D.
	6979		704	0.037	146 10	264 47	298 19	- 3 5	b.
	6980		704	0.059	239 14	266 19	299 51	- 2 44	c.
	6981		704	0.097	269 25	268 9	301 41	- 3 48	d.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Sept. 2.	6982	244.431	704	0.318	281° 20'	279° 1'	299° 0'	— 2° 50'	A.
	6983		704	0.307	282 10	277 51	297 50	— 1 17	B.
	6984		704	0.270	285 19	279 9	299 8	— 3 39	C.
	6985		704	0.260	287 3	276 29	296 28	+ 0 19	a.
	6986		704	0.232	289 2	278 51	298 50	— 1 16	b.
4.	6987	246.436	704	0.606	289 2	309 11	300 44	— 3 43	M.
	6988		704	0.684	288 1	306 29	298 2	— 3 36	m.
	6989		704	0.641	287 14	305 48	297 21	+ 1 35	n.
	6990		704	0.690	287 17	307 56	299 29	— 2 5	o.
5.	6991	247.650	704	0.838	291 17	325 32	299 52	— 3 32	S.
	6992		704	0.870	291 41	326 50	301 10	— 1 35	T.
	6993		704	0.864	294 36	324 17	298 37	— 3 13	s.
	6994		704	0.852	292 50	323 12	297 32	— 2 11	t.
	6995		704	0.840	293 50	325 11	299 31	— 3 38	u.
	6996		704	0.872	295 14	322 29	296 49	— 1 7	v.
6.	6997	248.636	704	0.961	294 44	340 51	301 12	— 3 17	Z.
	6998		704	0.940	295 11	339 43	300 4	+ 0 56	a.
	6999		704	0.956	295 11	340 5	300 26	— 1 4	b.
	7000		704	0.939	297 17	338 23	298 44	— 2 33	c.
7.	7001	249.656	704	0.989	294 20	353 17	299 9	— 3 7	M.
	7002		704	0.993	296 50	355 25	301 17	— 3 9	M ^o .
8.	7003	250.476	No spots visible.						
9.	7004	251.444							
13.	7005	255.454	705	0.962	125 9	211 5	74 43	—17 13	A.
	7006		705	0.973	127 4	213 21	76 59	—18 11	a.
14.	7007	256.461	705	0.824	126 39	226 31	75 52	—16 3	A ^o .
	7008		705	0.833	124 16	223 23	72 44	—18 44	a ^o .
15.	7009	257.466	705	0.710	137 35	239 27	74 32	—19 36	a.
	7010		705	0.764	138 40	237 44	72 49	—18 17	b.
16.	7011	258.448	705	0.622	148 31	249 49	70 59	—17 54	M.
	7012		705	0.631	147 42	254 41	75 51	—17 46	N.
	7013		705	0.688	146 37	251 52	73 2	—19 49	m.
	7014		705	0.699	146 51	253 11	74 21	—18 40	n.
18.	7015	260.513	705	0.311	211 2	283 39	75 32	—16 5	A.
	7016		705	0.363	199 31	279 34	71 27	—19 39	a.
	7017		706	0.712	276 26	324 59	116 52	— 8 28	B.
	7018		706	0.708	274 1	323 21	115 14	— 8 49	b.
	7019		706	0.664	277 10	320 17	112 10	— 7 37	b ^o .
19.	7020	261.518	705	0.320	251 26	298 53	76 30	—16 12	Z.
	7021		706	0.850	277 41	337 45	115 22	— 8 4	a.
	7022		706	0.860	277 58	336 24	114 1	— 7 59	b.
	7023		706	0.866	278 59	335 45	113 22	— 8 52	c.
	7024		706	0.843	277 26	334 54	112 31	— 7 5	d.
	7025		706	0.838	289 58	338 35	116 12	— 7 54	e.
20.	7026	262.474	705	0.522	259 11	310 23	74 26	—16 26	M.
	7027		706	0.902	277 36	350 49	114 52	— 7 7	A.
	7028		706	0.940	277 59	352 21	116 24	— 8 49	a.
	7029		706	0.952	279 2	348 12	112 15	— 8 15	b.
	7030		706	0.919	278 19	351 40	115 43	— 7 56	B.
	7031		706	0.948	279 38	351 2	115 5	— 9 46	C.
22.	7032	264.500	707	0.970	104 25	210 19	305 38	+ 2 38	P.
	7033		707	0.975	109 0	209 35	304 54	— 1 43	Q.
	7034		707	0.976	107 17	207 37	302 56	+ 3 2	p.
	7035		707	0.983	111 9	211 35	306 54	— 2 1	q.
23.	7036	265.442	707	0.901	107 19	222 29	304 27	+ 2 53	A.
	7037		707	0.912	108 5	219 44	301 42	— 2 49	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1865. Sept. 23.	7038	265.442	707	0.914	111° 22'	223° 13'	305° 11'	— 0° 49'	C.
	7039		707	0.959	112 34	223 19	306 17	— 1 27	a.
	7040		707	0.966	112 11	224 1	305 59	+ 2 19	b.
25.	7041	267.517	707	0.569	108 57	252 54	305 26	— 2 39	P.
	7042		707	0.572	109 14	253 30	306 2	— 3 31	Q.
	7043		707	0.644	114 52	254 37	307 9	+ 1 35	R.
	7044		707	0.606	112 36	250 9	302 41	+ 0 27	p.
	7045		707	0.657	109 15	251 17	303 49	+ 0 4	q.
	7046		707	0.593	108 32	252 7	304 39	— 2 5	r.
	7047		707	0.680	115 31	252 35	305 7	— 2 47	s.
26.	7048	268.471	707	0.397	104 20	267 31	306 39	— 2 39	M.
	7049		707	0.399	112 43	266 29	305 37	— 3 17	N.
	7050		707	0.450	110 0	265 42	304 50	+ 0 23	O.
	7051		707	0.441	106 54	261 28	300 36	+ 1 56	P.
	7052		707	0.472	114 18	268 10	307 18	+ 2 41	m.
	7053		707	0.480	115 14	262 47	301 55	+ 3 34	n.
	7054		707	0.490	115 31	266 20	305 28	— 3 50	o.
	7055		707	0.457	106 4	267 36	306 44	— 2 2	p.
	7056		707	0.460	108 18	268 18	307 26	+ 2 47	Q.
	7057		707	0.427	113 9	266 29	305 37	+ 2 24	R.
	7058		707	0.406	114 21	265 32	304 40	— 2 32	q.
	7059		707	0.499	116 39	267 15	306 23	+ 3 1	r.
27.	7060	269.536	707	0.136	91 35	284 20	308 13	+ 3 44	A.
	7061		707	0.159	104 37	282 32	306 25	+ 2 20	B.
	7062		707	0.253	97 49	281 51	305 44	+ 2 12	C.
	7063		707	0.272	103 25	280 31	304 24	+ 2 18	a.
	7064		707	0.190	117 51	283 37	307 30	+ 1 39	b.
	7065		707	0.281	120 28	280 9	304 2	+ 1 59	c.
	7066		707	0.226	99 36	279 4	302 57	— 0 10	D.
	7067		707	0.202	100 40	276 34	300 27	— 1 16	d.
	7068		707	0.279	122 41	275 9	299 2	— 1 55	E.
	7069		707	0.281	115 46	277 21	301 14	— 2 54	e.
	7070		707	0.288	122 48	275 49	299 42	— 2 35	f.
	7071		708	0.881	283 0	350 32	14 25	— 4 41	S.
	7072		708	0.890	283 50	351 39	15 32	— 5 57	T.
	7073		708	0.897	284 22	349 45	13 38	— 5 20	s.
28.	7074	270.490	707	0.043	268 36	291 13	301 34	+ 1 9	A.
	7075		707	0.057	194 39	290 24	300 45	— 0 53	a.
	7076		707	0.069	165 9	289 29	299 50	+ 1 11	B.
	7077		707	0.102	121 38	287 22	297 43	— 3 24	b.
	7078		709	0.252	248 29	300 47	311 8	— 9 29	C.
	7079		709	0.254	250 43	301 33	311 54	— 11 53	c.
	7080		710	0.961	104 37	219 37	229 58	+ 4 7	D.
30.	7081	272.419	707	0.468	298 39	315 25	298 25	— 1 46	a.
	7082		707	0.473	299 4	317 2	300 2	+ 0 18	b.
	7083		711	0.431	284 48	317 15	300 15	— 4 56	x.
Oct. 2.	7084	274.451	707	0.809	301 31	345 44	299 54	+ 1 10	a ^o .
	7085		707	0.814	301 48	346 1	300 11	+ 1 59	b ^o .
	7086		712	0.975	108 30	220 58	175 8	— 0 31	A.
3.	7087	275.469	707	0.910	303 37	0 52	300 36	+ 1 11	a.
	7088		712	0.895	111 57	235 2	174 46	+ 0 47	B.
4.	7089	276.605	707	0.988	303 6	16 4	299 37	+ 1 27	B.
	7090		712	0.728	111 15	251 41	175 14	— 1 59	c.
5.	7091	277.501	712	0.556	111 44	263 16	174 11	— 1 0	A.
6.	7092	278.478	712	0.405	110 47	278 32	175 35	— 0 42	a.
7.	7093	279.434	712	0.188	115 37	291 9	174 38	+ 0 16	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1865.									
Oct. 7.	7094	279.434	713	0.994	130° 52'	215° 44'	99° 13'	-18° 12'	B.
10.	7095	282.488	713	0.715	140 52	259 53	100 3	-17 14	C.
	7096		713	0.728	135 30	257 22	97 32	-20 54	D.
	7097		713	0.751	138 11	256 0	96 10	-21 53	c.
	7098		713	0.794	134 43	258 16	98 26	-17 29	d.
	7099		713	0.813	133 52	257 33	97 43	-18 15	e.
11.	7100	283.532	713	0.553	151 47	277 32	102 54	-20 43	M.
	7101		713	0.594	149 54	274 1	99 23	-19 59	N.
	7102		713	0.638	150 57	271 55	97 17	-19 41	m.
	7103		713	0.559	145 51	275 39	101 1	-18 7	n.
	7104		713	0.641	147 49	271 32	96 54	-17 18	P.
	7105		713	0.662	149 45	270 28	95 50	-21 59	p.
	7106		713	0.581	147 6	268 29	93 51	-18 34	Q.
	7107		713	0.612	147 21	274 23	99 45	-17 17	q.
	7108		713	0.633	145 46	274 57	100 19	-17 8	S.
	7109		713	0.641	145 3	275 7	100 29	-19 22	s.
	7110		713	0.584	146 19	266 49	92 11	-20 19	T.
	7111		713	0.672	144 21	272 17	97 39	-21 54	t.
12.	7112	284.514	713	0.422	168 19	289 36	101 2	-18 6	A.
	7113		713	0.471	165 42	286 15	97 41	-19 9	B.
	7114		713	0.515	159 33	284 7	95 33	-20 49	C.
	7115		713	0.450	161 55	284 58	96 24	-21 19	D.
	7116		713	0.462	156 56	289 49	101 15	-20 30	a.
	7117		713	0.491	158 44	287 23	98 49	-17 40	b.
	7118		713	0.527	154 6	287 25	98 51	-17 1	c.
	7119		714	0.841	123 6	286 1	97 27	-18 48	d.
	7120		714	0.860	122 58	287 6	98 32	-17 33	e.
13.	7121	285.512	713	0.338	199 37	305 38	102 55	-18 49	M.
	7122		713	0.342	196 25	304 23	101 40	-19 19	m.
	7123		713	0.354	193 6	301 1	98 18	-19 45	n.
	7124		713	0.388	190 3	300 38	97 55	-17 11	A.
	7125		713	0.372	187 44	301 32	98 49	-18 20	a.
	7126		713	0.391	181 55	300 58	98 15	-20 18	B.
	7127		713	0.436	185 35	297 10	94 27	-21 21	b.
	7128		713	0.414	186 53	299 2	96 19	-20 47	C.
	7129		713	0.444	178 29	296 41	95 58	-23 26	c.
	7130		714	0.650	125 3	265 38	62 55	-7 10	D.
	7131		714	0.691	125 58	262 13	59 30	-7 20	d.
17.	7132	289.635	713	0.805	275 44	0 23	99 11	-18 53	S.
	7133		713	0.832	273 50	358 17	97 5	-20 27	s.
	7134		713	0.827	275 57	2 8	100 56	-19 54	T.
	7135		713	0.848	272 6	359 44	98 32	-22 48	t.
	7136		714	0.349	268 36	326 17	65 5	-6 2	v.
24.	7137	296.459	No spots visible.						
27.	7138	299.501							
28.	7139	300.429							
Nov. 2.	7140	305.535							
3.	7141	306.487	715	0.983	126 15	246 3	105 49	-13 4	A.
4.	7142	307.464	715	0.940	127 53	259 38	105 32	-12 9	A.
	7143		715	0.942	126 13	259 0	104 54	-13 7	a.
	7144		715	0.962	126 53	258 56	104 50	-12 46	b.
8.	7145	311.604	715	0.347	152 38	317 23	104 34	-12 52	B.
	7146		715	0.354	154 59	318 7	105 18	-13 59	b.
	7147		716	0.371	22 40	329 3	116 14	+23 35	C.
	7148		716	0.531	8 40	334 59	122 10	+34 5	c.
	7149		716	0.555	10 10	335 46	122 57	+36 4	D.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1865.									
Nov. 8.	7150	311.604	716	0.598	8° 50'	337° 27'	114° 38'	+38° 15'	d.
10.	7151	313.455	715	0.353	235 51	345 8	106 3	-14 50	M.
	7152		715	0.360	240 8	344 46	105 41	-14 59	m.
	7153		717	0.544	100 8	303 9	64 4	+12 34	N.
	7154		717	0.557	99 22	301 59	62 54	+13 42	n.
13.	7155	316.503	715	0.831	274 42	26 32	104 13	-12 14	O.
	7156		718	0.946	117 53	265 23	343 4	- 4 49	S.
	7157		718	0.969	116 37	267 11	344 52	- 4 28	s.
15.	7158	318.448	715	0.979	277 24	55 32	105 38	-13 44	A.
	7159		718	0.665	121 47	298 38	348 44	- 5 13	C.
	7160		718	0.731	119 17	295 54	346 0	- 4 28	c.
	7161		718	0.701	120 30	294 26	344 32	- 4 11	c ¹ .
	7162		718	0.754	118 28	292 20	342 26	- 4 19	c ² .
22.	7163	325.471	719	0.951	94 30	276 14	226 43	+12 49	A.
	7164		719	0.956	95 7	272 8	222 37	+13 17	a.
	7165		719	0.974	96 0	272 58	223 27	+13 43	b.
23.	7166	326.522	719	0.851	93 31	283 57	219 31	+12 54	a.
	7167		719	0.867	94 0	287 23	222 57	+14 21	b.
	7168		719	0.895	93 25	288 49	224 23	+13 58	c.
	7169		719	0.902	95 20	290 3	225 37	+12 23	d.
24.	7170	327.479	719	0.705	88 25	304 1	226 1	+14 30	M.
	7171		719	0.711	89 54	299 0	221 0	+13 49	m.
	7172		719	0.784	91 45	302 47	224 47	+14 36	N.
	7173		719	0.796	92 31	297 34	219 34	+12 34	n.
Dec. 2.	7174	335.475	719	0.892	297 5	55 58	224 33	+13 9	B.
	7175		719	0.889	298 40	56 32	225 7	+14 47	b.
	7176		720	0.290	341 1	6 51	175 26	+15 7	S.
	7177		721	0.869	119 48	297 29	106 4	-12 20	s.
13.	7178	346.462	No spots visible.						
14.	7179	347.460							
19.	7180	352.543							
30.	7181	363.609							
	7182		724*	0.704	112 12	340 38	110 9	-14 28	A.
	7183		724	0.752	111 54	338 21	107 52	-13 43	B.
	7184		724	0.741	112 15	338 43	108 14	-14 9	a.
	7185		724	0.766	113 51	337 29	107 0	-15 21	b.
1866.	7186	0.462	724	0.366	129 6	8 26	111 40	-13 18	M.
Jan. 1.	7187		724	0.411	125 4	7 4	110 18	-13 53	m.
	7188		724	0.394	127 54	5 37	108 51	-14 16	N.
	7189		725	0.429	124 32	3 59	107 13	-13 56	n.
	7190		725	0.305	103 42	9 29	112 43	- 4 54	P.
	7191		725	0.309	102 29	9 15	112 29	- 4 27	Q.
	7192		725	0.398	102 52	3 7	106 21	- 3 17	p.
	7193		725	0.406	99 1	4 58	108 12	- 3 49	q.
3.	7194	2.450	724	0.288	216 33	30 22	105 24	-13 34	A.
	7195		724	0.294	213 56	32 18	107 20	-14 23	a.
	7196		724	0.305	209 33	33 28	108 30	-13 24	a ¹ .
	7197		725	0.184	245 29	37 14	112 16	- 4 55	B.
	7198		725	0.172	234 46	36 0	111 2	- 3 3	C.
	7199		725	0.169	240 52	31 37	106 39	- 3 24	b.
	7200		725	0.151	228 49	32 49	107 51	- 2 44	c.
	7201	3.534	726	0.973	77 25	315 42	30 44	+12 51	D.
4.	7202		724	0.455	238 24	46 41	106 21	-13 48	A.
	7203		724	0.460	239 15	48 33	108 13	-14 15	a.
	7204		725	0.402	260 25	53 16	112 56	- 4 21	B.
	7205		725	0.409	262 24	58 0	107 40	- 3 11	c.
			725	0.336	259 38	59 0	108 40	- 3 33	d.

* Groups 722 and 723 were visible on the 20th December, but the limb of the Sun-picture was so ill-defined that the determination of their heliographic position was rendered impossible.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1866.									
Jan. 4.	7206	3.534	726	0.894	75° 7'	331° 9'	30° 49'	+13° 39'	b.
7.	7207	6.583	724	0.917	251 8	90 56	107 21	-13 27	M.
	7208		724	0.911	252 23	92 7	108 32	-14 14	m.
	7209		725	0.913	263 33	92 59	109 24	- 3 19	N.
	7210		726	0.404	51 19	12 46	29 11	+12 29	O.
8.	7211	7.501	724	0.972	251 31	103 18	106 41	-13 33	S.
	7212		724	0.976	251 50	105 30	108 53	-14 9	T.
	7213		725	0.970	262 27	107 13	110 36	- 3 47	s.
	7214		726	0.274	26 39	25 51	29 14	+13 6	t.
	7215		727	0.985	78 53	313 54	317 17	+14 58	A.
9.	7216	8.459	727	0.948	76 38	325 41	315 29	+13 4	M.
	7217		727	0.942	77 57	326 56	316 44	+12 26	m.
	7218		727	0.959	77 2	322 39	312 27	+13 27	n.
	7219		727	0.963	79 7	324 0	313 48	+13 54	o.
15.	7220	14.504	727	0.351	300 38	54 26	318 29	+15 18	M.
	7221		727	0.340	301 52	52 9	316 12	+14 19	m.
	7222		727	0.333	302 13	51 29	315 32	+13 41	n.
	7223		727	0.327	303 20	52 35	316 38	+14 21	o.
	7224		727	0.318	301 14	51 17	315 20	+14 49	a.
	7225		727	0.310	308 4	49 15	313 18	+13 33	b.
	7226		727	0.270	304 32	49 39	313 42	+13 2	c.
	7227		727	0.246	309 16	48 39	312 42	+12 37	d.
	7228		728	0.948	90 25	332 17	236 20	- 6 5	D.
	7229		728	0.950	91 40	330 29	234 32	- 5 28	E.
	7230		728	0.980	92 39	335 29	239 32	- 6 21	f.
	7231		728	0.972	91 13	332 21	236 24	- 5 58	g.
	7232		728	0.987	93 27	333 39	237 42	- 6 9	h.
19.	7233	18.496	727	0.954	271 52	109 9	316 35	+12 42	A.
	7234		727	0.958	273 41	105 37	313 3	+14 27	a.
	7235		728	0.274	94 4	30 16	237 42	- 6 55	M.
	7236		728	0.282	92 54	29 27	236 53	- 6 22	m.
	7237		728	0.295	91 50	29 41	237 7	- 5 24	n.
	7238		728	0.311	90 59	28 17	235 43	- 6 11	o.
	7239		728	0.324	91 50	27 18	234 44	- 6 54	p.
	7240		728	0.380	90 20	22 59	230 25	- 5 22	q.
	7241		729	0.444	94 15	20 15	227 41	- 9 4	S.
	7242		729	0.461	92 41	19 10	226 36	- 8 27	s.
	7243		729	0.455	93 20	19 1	226 27	- 9 48	T.
	7244		729	0.453	93 16	17 4	224 30	- 8 15	t.
	7245		729	0.469	91 22	16 57	224 23	- 7 56	v.
23.	7246	22.510	728	0.620	252 8	87 4	237 34	- 6 33	M.
	7247		728	0.611	251 34	82 58	233 28	- 6 16	m.
	7248		729	0.446	250 17	74 52	225 22	- 8 59	N.
24.	7249	23.494	728	0.783	251 36	100 8	236 40	- 5 36	B.
	7250		728	0.768	250 15	94 8	230 40	- 6 15	b.
29.	7251	28.502	730	0.508	51 13	25 21	90 51	+14 51	S.
	7252		730	0.564	54 7	23 16	88 46	+13 19	s.
	7253		730	0.572	54 11	21 8	86 38	+13 7	t.
	7254		731	0.802	86 19	1 11	66 41	- 6 27	a.
	7255		731	0.807	87 58	1 16	66 46	- 7 39	b.
	7256		731	0.839	89 15	358 2	63 32	- 7 39	c.
	7257		731	0.848	89 30	358 37	64 7	- 8 15	d.
Feb. 5.	7258	35.505	731	0.612	237 19	99 13	65 23	- 7 59	A.
	7259		731	0.600	237 19	98 24	64 34	- 7 54	a.
	7260		731	0.594	239 29	96 28	62 38	- 6 45	a ¹ .
	7261		732	0.943	64 48	354 37	320 47	+14 36	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866.									
Feb. 5.	7262	35.505	732	0.946	65° 19'	356° 46'	322° 56'	+13° 15'	b.
	7263		732	0.938	65 25	356 56	323 6	+13 43	b ¹ .
6.	7264	36.478	731	0.788	243 16	112 3	64 26	- 7 42	C.
	7265		732	0.937	59 6	11 33	323 56	+13 11	D.
	7266		732	0.932	59 41	12 4	324 27	+14 14	d.
8.	7267	38.485	731	0.976	243 12	141 26	65 20	- 6 54	S.
	7268		732	0.465	41 29	38 40	322 34	+14 17	a.
	7269		732	0.471	42 7	38 21	322 15	+14 13	b.
	7270		732	0.483	43 2	37 10	321 4	+13 22	c.
	7271		732	0.540	45 56	32 50	316 44	+13 23	d.
10.	7272	40.480	732	0.277	338 10	67 16	322 52	+14 12	B.
	7273		732	0.279	341 23	68 27	324 3	+14 13	b.
	7274		732	0.297	335 42	69 49	325 25	+16 10	b ¹ .
	7275		733	0.743	271 9	114 37	10 13	+14 7	C.
	7276		733	0.708	274 6	113 33	9 9	+15 57	c.
	7277		733	0.694	275 8	112 37	8 13	+16 10	c ¹ .
	7278		734	0.995	61 17	348 24	244 0	+20 26	D.
13.	7279	43.494	732	0.690	271 8	110 38	323 29	+13 46	A.
	7280		732	0.694	271 52	111 38	324 29	+14 28	a.
	7281		734	0.699	49 0	31 38	244 29	+19 57	B.
	7282		735	0.892	56 36	7 39	220 30	+15 31	C.
	7283		735	0.916	57 18	358 36	211 27	+18 32	D.
	7284		735	0.917	59 14	2 42	215 33	+19 40	E.
	7285		735	0.955	58 21	0 44	213 35	+16 59	c.
	7286		735	0.961	58 42	3 55	216 46	+16 16	d.
	7287		735	0.963	60 21	5 39	218 30	+17 8	e.
18.	7288	48.423	734	0.512	84 40	101 56	244 52	+19 19	M.
	7289		735	0.310	311 43	80 23	223 19	+16 13	A.
	7290		735	0.315	317 30	79 48	222 44	+14 5	B.
	7291		735	0.320	334 45	75 44	218 40	+14 23	C.
	7292		735	0.321	346 48	76 16	219 12	+13 50	D.
	7293		735	0.323	355 47	70 24	213 20	+13 2	E.
	7294		735	0.305	319 11	71 13	214 9	+15 22	a
	7295		735	0.299	351 46	72 49	215 45	+16 34	b.
	7296		735	0.272	346 17	72 16	215 12	+18 8	c.
	7297		735	0.281	345 52	69 13	212 9	+19 56	d.
	7298		735	0.283	358 13	68 58	211 54	+18 13	e.
	7299		735	0.260	358 46	68 6	211 2	+17 18	f.
19.	7300	49.537	734	0.694	272 50	118 3	245 11	+19 14	D.
	7301		735	0.456	282 44	95 41	222 49	+14 26	S.
	7302		735	0.432	291 12	91 52	219 0	+15 40	T.
	7303		735	0.410	295 40	91 3	218 11	+16 6	U.
	7304		735	0.419	315 33	90 21	217 29	+18 52	s.
	7305		735	0.371	312 34	85 27	212 35	+19 28	t.
	7306		735	0.384	317 4	84 30	211 38	+19 43	u.
	7307		735	0.349	288 23	86 17	213 25	+14 12	v.
	7308		735	0.361	292 17	86 49	213 57	+15 55	M.
	7309		735	0.359	317 21	87 4	214 12	+15 18	m.
	7310		735	0.344	314 37	88 11	215 19	+16 17	N.
	7311		735	0.390	316 5	84 53	212 1	+16 16	n.
	7312		735	0.345	318 45	84 37	211 45	+16 50	O.
20.	7313	50.591	734	0.853	266 3	132 31	244 42	+20 44	D ^o .
	7314		735	0.648	273 6	110 20	222 31	+15 32	S.
	7315		735	0.650	281 28	104 48	216 59	+16 48	s.
	7316		735	0.539	277 31	102 56	215 7	+16 12	T.
	7317		735	0.591	275 22	105 31	217 42	+17 56	t.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866. Feb. 20.	7318	50.591	735	0.588	275° 39'	98° 51'	211° 2'	+16° 46'	a.
	7319		735	0.550	279 38	99 56	212 7	+15 38	b.
	7320		735	0.540	280 10	100 3	212 14	+14 36	c.
	7321		735	0.609	278 31	101 1	213 12	+14 37	d.
	7322		735	0.601	278 41	104 42	216 53	+13 24	e.
	7323		735	0.528	282 55	106 1	218 12	+14 1	f.
	7324		735	0.466	283 53	99 8	211 19	+13 28	M.
	7325		735	0.471	284 33	101 58	214 9	+14 17	m.
	7326		735	0.510	284 37	107 33	219 44	+14 27	N.
	7327		735	0.519	285 0	108 57	221 8	+15 20	n.
21.	7328	51.541	734	0.946	263 33	147 2	245 45	+19 0	A.
	7329		735	0.800	266 18	124 14	222 57	+18 59	B.
	7330		735	0.790	268 9	120 13	218 56	+13 31	C.
	7331		735	0.672	272 12	120 54	219 37	+14 14	D.
	7332		735	0.755	270 40	124 48	223 31	+15 19	b.
	7333		735	0.709	274 44	113 28	212 11	+15 55	c.
	7334		735	0.684	269 5	116 53	215 36	+14 8	d.
	7335		735	0.645	275 13	117 48	216 31	+13 57	e.
23.	7336	53.632	735	0.971	258 3	153 23	222 26	+15 32	M.
	7337		735	0.951	261 34	150 9	219 12	+18 24	m.
	7338		735	0.917	259 7	149 19	218 22	+17 54	N.
	7339		735	0.936	260 10	150 46	219 49	+16 16	n.
	7340		735	0.944	260 48	151 50	220 53	+14 28	O.
	7341		735	0.909	263 2	144 20	213 23	+14 48	P.
24.	7342	54.486	735	0.977	257 46	159 53	216 49	+17 44	A ⁰ .
	7343		735	0.980	259 32	162 21	219 17	+14 3	a ¹ .
26.	7344	56.482	736	0.608	74 28	48 24	77 1	— 5 14	S.
	7345		736	0.623	74 10	44 38	73 15	— 4 38	s.
	7346		736	0.647	72 16	43 5	71 42	— 5 58	t.
Mar. 2.	7347	60.471	737	0.747	44 56	41 14	13 16	+16 55	B.
	7348		737	0.751	45 12	40 56	12 58	+16 13	b.
6.	7349	64.650	738	0.692	44 59	52 41	325 27	+19 48	M.
7.	7350	65.458	738	0.556	36 27	62 58	324 16	+18 17	M ⁰ .
8.	7351	66.497	738	0.398	21 11	77 27	324 1	+19 3	M ¹ .
12.	7352	70.479	738	0.636	269 41	135 26	325 31	+19 26	A.
	7353		739	0.892	48 3	38 24	228 29	+15 38	a.
	7354		739	0.895	49 21	39 47	229 52	+15 55	b.
	7355		739	0.901	51 33	36 8	226 13	+14 13	c.
14.	7356	72.413	738	0.903	258 43	162 48	325 27	+19 36	A ⁰ .
	7357		739	0.577	37 24	66 31	229 10	+16 51	a ¹ .
	7358		739	0.579	38 43	65 26	228 5	+15 44	b ¹ .
	7359		739	0.619	40 45	63 45	226 24	+14 18	c ¹ .
22.	7360	80.497	739	0.570	276 44	177 42	225 41	+14 18	M.
	7361		740	0.788	44 22	65 20	113 19	+16 57	a.
	7362		740	0.793	45 16	63 1	111 0	+15 54	b.
	7363		740	0.809	46 9	63 28	111 27	+17 43	c.
23.	7364	81.502	739	0.705	269 13	192 56	226 40	+14 41	N.
	7365		740	0.556	33 6	81 32	115 16	+17 47	A.
	7366		740	0.580	38 38	79 1	112 45	+16 35	a.
	7367		740	0.612	36 55	82 48	116 32	+18 36	B.
	7368		740	0.564	33 17	81 8	114 52	+19 24	b.
	7369		740	0.620	39 35	78 0	111 44	+19 9	c.
24.	7370	82.443	739	0.841	261 2	206 7	226 31	+15 49	D.
	7371		739	0.843	261 28	207 3	227 27	+15 21	d.
	7372		740	0.396	23 37	94 43	115 7	+17 9	E.
	7373		740	0.408	24 20	91 50	112 14	+17 43	e.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866. Mar. 24.	7374	82.443	740	0.421	22° 53'	93° 29'	113° 53'	+16° 8'	A ¹ .
	7375		740	0.483	27 20	89 39	110 3	+15 12	B ¹ .
	7376		740	0.459	24 12	90 41	111 5	+17 59	a ¹ .
	7377		740	0.510	29 32	92 27	112 51	+15 15	b ¹ .
	7378		741	0.558	69 23	75 5	95 29	- 3 34	C.
	7379		741	0.571	70 49	77 0	97 24	- 2 7	c.
27.	7380	85.534	740	0.493	277 49	139 52	116 24	+15 50	A.
	7381		740	0.495	279 32	137 25	113 57	+15 39	B.
	7382		740	0.498	280 4	137 8	113 40	+16 48	C.
	7383		740	0.456	287 24	134 2	110 34	+17 52	a.
	7384		740	0.459	287 23	134 56	111 28	+17 19	b.
	7385		740	0.461	289 18	133 1	109 33	+18 32	c.
	7386		741	0.187	241 11	121 23	97 55	- 2 19	D.
	7387		741	0.136	212 22	117 52	94 24	- 3 59	d.
	7388		741	0.129	213 0	116 40	93 12	- 3 15	E.
	7389		741	0.092	169 44	112 17	88 49	- 2 17	e.
29.	7390	87.418	741	0.812	259 0	144 47	94 36	- 3 23	M.
	7391		741	0.807	260 34	140 45	90 34	- 3 13	m.
	7392		741	0.792	260 33	139 46	89 35	- 2 55	N.
	7393		741	0.745	264 7	143 47	93 36	- 3 59	n.
30.	7394	88.476	741	0.919	256 13	157 25	92 14	- 3 49	M ⁰ .
Apr. 3.	7395	92.498	742	0.609	39 2	87 27	325 12	+15 17	A.
	7396		742	0.615	39 34	86 45	324 30	+14 45	a.
	7397		742	0.626	40 29	86 42	324 27	+14 51	a ¹ .
5.	7398	94.499	742	0.287	1 48	115 48	325 11	+15 52	B.
	7399		742	0.292	1 31	116 0	325 23	+14 39	C.
	7400		742	0.301	0 39	114 17	323 40	+15 55	b.
	7401		742	0.305	358 29	114 53	324 16	+16 5	c.
6.	7402	95.476	742	0.285	316 10	129 54	325 25	+15 23	x.
	7403		743	0.635	25 6	91 17	286 48	+26 38	M.
	7404		743	0.650	27 3	90 44	286 15	+28 13	m.
	7405		743	0.661	27 40	88 17	283 48	+29 48	n.
12.	7406	101.487	744	0.410	62 30	97 12	207 27	- 3 47	S.
	7407		744	0.413	62 52	99 8	209 23	- 2 39	T.
	7408		744	0.488	64 30	98 32	208 47	- 3 33	s.
	7409		744	0.491	64 54	97 54	208 9	- 3 46	t.
	7410		745	0.910	43 43	65 48	176 3	+18 41	K.
	7411		745	0.915	44 19	68 19	178 34	+18 19	k.
14.	7412	103.437	744	0.099	93 16	126 22	208 58	- 2 41	A.
	7413		744	0.084	78 32	125 49	208 25	- 3 18	a ¹ .
	7414		745	0.661	36 5	95 10	177 46	+19 56	S.
	7415		745	0.670	37 38	93 41	176 17	+18 18	s.
	7416		745	0.675	37 9	93 24	176 0	+18 53	t.
16.	7417	105.649	745	0.392	358 48	126 57	178 10	+19 50	A.
	7418		745	0.405	0 46	125 53	177 6	+19 8	B.
	7419		745	0.411	359 12	126 40	177 53	+21 11	a.
	7420		745	0.427	1 13	125 18	176 31	+20 6	b.
18.	7421	107.451	745	0.417	294 11	150 59	176 39	+19 2	C
	7422		745	0.422	296 19	151 42	177 22	+20 10	c.
	7423		745	0.431	299 29	152 58	178 38	+19 56	D.
19.	7424	108.541	745	0.556	278 24	167 23	177 35	+18 7	S.
	7425		745	0.577	282 26	169 7	179 19	+19 23	s.
	7426		745	0.582	279 28	166 5	176 17	+19 50	T.
	7427		745	0.563	281 34	167 59	178 11	+18 28	t.
	7428		745	0.589	283 27	165 46	175 58	+20 39	m.
20.	7429	109.463	745	0.715	268 52	179 38	176 45	+19 7	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866.									
Apr. 20.	7430	109.463	745	0.726	270 45	180 37	177 44	+18 52	a.
	7431		745	0.733	269 39	181 5	178 12	+19 51	b.
21.	7432	110.468	745	0.866	264 12	195 3	177 55	+18 17	M.
	7433		745	0.871	266 56	193 51	176 43	+20 20	m.
23.	7434	112.434	746	0.714	51 16	96 27	51 26	+10 15	A.
	7435		746	0.729	53 5	95 55	50 54	+ 8 3	B.
	7436		746	0.751	53 29	93 14	48 13	+ 9 59	a.
	7437		746	0.765	53 30	92 40	47 39	+10 5	b.
24.	7438	113.460	746	0.506	49 38	109 9	49 35	+10 19	M.
	7439		746	0.554	50 37	106 46	47 12	+ 9 43	m.
	7440		746	0.560	52 32	109 59	50 25	+ 9 32	n.
	7441		746	0.519	51 28	110 50	51 16	+ 8 6	P.
	7442		746	0.537	51 41	110 48	51 14	+10 16	p.
	7443		746	0.561	52 14	107 43	48 9	+10 29	p ⁰ .
25.	7444	114.482	746	0.300	37 22	125 31	51 27	+ 8 34	A.
	7445		746	0.317	39 41	124 25	50 21	+ 9 20	a.
	7446		746	0.333	38 18	123 10	49 6	+ 9 43	b.
	7447		746	0.336	39 13	124 48	50 44	+ 9 4	B.
	7448		746	0.387	40 55	120 31	46 27	+10 48	b.
26.	7449	115.466	746	0.146	341 0	140 53	52 50	+10 42	S.
	7450		746	0.179	346 26	139 57	51 54	+10 29	s.
	7451		746	0.161	355 9	138 29	50 26	+11 0	T.
	7452		746	0.155	350 58	138 58	50 55	+11 32	t.
	7453		746	0.184	357 47	136 48	48 45	+ 8 21	v.
27.	7454	116.478	746	0.192	284 8	158 36	56 13	+ 9 18	A.
	7455		746	0.226	281 1	159 23	57 0	+10 55	a.
	7456		746	0.294	279 3	152 37	50 14	+11 45	b.
	7457		746	0.271	273 25	155 14	52 51	+10 32	c.
	7458		746	0.305	275 39	158 29	56 6	+10 26	B.
	7459		746	0.250	281 23	151 8	48 45	+ 9 9	C.
	7460		746	0.246	277 46	150 24	48 1	+ 9 30	e.
	7461		746	0.317	272 20	150 47	48 24	+ 8 57	f.
30.	7462	119.449	746	0.814	254 4	195 21	50 50	+10 12	G.
May 2.	7463	121.660	No spots visible.						
3.	7464	122.504							
4.	7465	123.442							
5.	7466	124.441							
7.	7467	126.487							
8.	7468	127.443	748	0.492	67 49	126 28	228 33	+ 3 57	A.
	7469		748	0.507	69 57	125 9	227 14	+ 3 9	a.
9.	7470	128.504	748	0.263	69 41	142 52	229 54	+ 3 20	A ⁰ .
	7471		748	0.299	68 33	141 39	228 41	+ 4 6	a ⁰ .
	7472		748	0.301	69 34	139 4	226 6	+ 4 36	B.
	7473		749	0.466	74 0	129 9	216 11	+ 1 21	b.
	7474		749	0.528	73 14	126 8	213 10	+ 2 37	b ⁰ .
	7475		749	0.534	72 6	125 41	212 42	+ 2 57	c.
10.	7476	129.458	748	0.008	41 10	154 46	228 16	+ 3 11	A.
	7477		748	0.052	56 10	151 4	224 34	+ 2 40	a.
	7478		749	0.156	84 50	143 8	216 38	- 1 12	B.
	7479		749	0.174	80 40	140 58	214 28	- 2 44	C.
	7480		749	0.254	79 8	138 18	211 48	- 2 16	D.
	7481		749	0.226	77 36	141 35	215 5	+ 0 30	b.
	7482		749	0.279	79 38	137 31	211 1	+ 1 53	c.
	7483		749	0.298	72 57	136 55	210 25	+ 2 0	d.
11.	7484	130.524	749	0.079	179 37	158 47	217 10	- 2 25	A.
	7485		749	0.092	180 25	154 4	212 27	- 1 17	B.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866. May 11.	7486	130.524	749	0.155	136° 49'	157° 38'	216° 1'	+ 1° 54'	C.
	7487		749	0.110	97 16	154 35	212 58	- 2 17	a.
	7488		749	0.129	155 10	152 30	210 53	- 2 4	b.
	7489		749	0.164	95 29	151 28	209 51	- 2 58	c.
	7490		749	0.175	126 48	150 40	209 3	- 4 50	S.
	7491		749	0.172	92 39	150 32	208 55	- 3 1	s.
12.	7492	131.470	749	0.305	231 55	174 18	219 16	- 3 55	M.
	7493		749	0.287	223 24	171 23	216 21	- 2 34	N.
	7494		749	0.195	218 50	169 11	214 9	- 2 15	O.
	7495		749	0.214	226 3	173 22	218 20	+ 0 42	P.
	7496		749	0.257	209 48	169 54	214 52	- 2 13	m.
	7497		749	0.176	210 8	168 30	213 28	- 3 9	n.
	7498		749	0.150	230 53	167 34	212 32	- 3 10	o.
	7499		749	0.211	225 53	170 50	215 48	- 3 51	p.
	7500		749	0.146	209 39	166 29	211 27	- 4 44	q.
15.	7501	134.602	749	0.873	244 27	213 32	214 4	- 3 8	S.
	7502		749	0.870	243 44	215 56	216 28	- 2 2	s.
	7503		749	0.810	240 54	210 36	211 8	+ 1 53	T.
	7504		749	0.812	241 34	212 42	213 14	+ 0 27	t.
16.	7505	135.618	749	0.904	240 51	227 37	213 44	- 3 16	A.
	7506		749	0.923	238 26	230 38	216 45	- 2 53	a.
17.	7507	136.470	749	0.972	241 7	241 28	215 30	- 2 56	A ⁰ .
	7508		750	0.922	81 56	100 19	74 21	- 7 2	B.
	7509		750	0.950	81 40	99 16	73 18	- 7 50	b.
18.	7510	137.490	750	0.805	81 42	115 26	75 0	- 7 18	A.
	7511		750	0.817	82 7	114 26	74 0	- 8 44	a.
	7512		750	0.829	81 16	114 23	73 57	- 7 9	b.
19.	7513	138.480	750	0.602	85 31	128 46	74 18	- 7 2	M.
	7514		750	0.617	85 47	127 4	72 36	- 7 35	m.
21.	7515	140.474	750	0.298	121 6	157 57	75 12	- 7 57	N.
	7516		750	0.305	116 0	155 42	82 57	- 8 24	n.
	7517		751	0.901	56 25	108 16	25 31	+ 14 16	O.
22.	7518	141.504	751	0.756	54 16	121 35	24 13	+ 15 3	S.
23.	7519	142.552	751	0.584	49 21	137 40	25 26	+ 14 42	S ¹ .
25.	7520	144.461	751	0.296	12 56	164 37	25 19	+ 15 18	A.
26.	7521	145.540	751	0.264	314 54	179 29	24 52	+ 14 38	A ⁰ .
28.	7522	147.464	751	0.555	275 11	206 12	25 18	+ 14 34	a ⁰ .
29.	7523	148.514	751	0.713	271 8	222 24	25 37	+ 14 24	a ¹ .
30.	7524	149.520	751	0.879	267 5	236 52	25 48	+ 14 47	M.
June 1.	7525	151.464	752	0.964	77 54	103 1	224 23	- 4 39	A.
	7526		752	0.970	78 43	100 57	222 19	- 3 41	a.
2.	7527	152.511	752	0.860	78 15	118 57	225 28	- 4 26	A.
	7528		752	0.875	79 56	115 48	222 19	- 3 47	a.
	7529		752	0.880	82 29	116 42	223 13	- 4 34	B.
	7530		752	0.869	80 37	114 57	221 28	- 4 30	b.
	7531		752	0.881	83 51	116 12	222 43	- 4 57	c.
6.	7532	156.497	752	0.138	116 14	175 49	225 47	- 3 55	M.
	7533		752	0.145	112 2	174 8	224 6	- 3 11	m.
	7534		752	0.187	114 21	173 30	223 28	- 4 33	N.
	7535		752	0.162	115 18	172 28	221 26	- 3 44	n.
	7536		752	0.159	113 9	174 46	224 44	- 4 4	O.
	7537		752	0.197	111 43	172 29	222 27	- 4 22	o.
24.	7538	174.529	755	0.923	254 22	258 53	53 5	- 8 12	A.
	7539		755	0.899	254 12	256 58	51 10	- 10 28	B.
	7540		755	0.912	252 54	252 28	46 40	- 10 25	C.
	7541		755	0.878	253 29	255 54	50 6	- 10 26	a.

TABLE III. (continued).

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1866.									
June 24.	7542	174.529	755	0.889	253 31	257 17	51 29	-11 57	b.
	7543		755	0.895	254 23	254 40	48 52	-9 34	c.
	7544		755	0.875	252 29	250 9	44 21	-12 43	d.
26.	7545	176.486	755	0.951	255 56	275 45	42 11	-10 38	A ^o .
	7546		755	0.976	256 32	279 52	46 18	-10 11	M ^o .
	7547		755	0.980	257 24	277 44	44 10	-11 6	N ^o .
	7548		755	0.958	255 30	280 37	47 3	-9 14	a.
	7549		755	0.982	257 19	281 42	48 8	-12 39	b.
27.	7550	177.504	755	0.998	255 3	289 49	41 49	-12 14	A.
	7551		755	0.997	256 54	289 20	41 20	-10 48	a.
28.	7552	178.493	756	0.716	74 22	154 44	252 42	+6 50	A.
	7553		756	0.733	73 12	155 3	253 1	+7 10	a.
	7554		756	0.749	73 20	155 29	253 27	+6 40	b.
	7555		757	0.958	93 58	130 16	228 14	-6 20	C.
	7556		757	0.957	92 16	129 8	227 6	-7 8	c.
30.	7557	180.496	756	0.348	61 50	184 57	254 31	+6 9	D.
	7558		756	0.387	65 39	182 56	252 30	+5 7	d.
	7559		756	0.365	64 12	183 2	252 36	+6 55	E.
	7560		756	0.392	67 25	180 15	249 49	+7 47	e.
	7561		757	0.702	97 51	160 35	230 9	-6 59	G.
	7562		757	0.734	96 43	159 41	229 15	-6 6	g.
	7563		757	0.769	95 14	157 18	226 52	-7 17	H.
	7564		757	0.805	94 47	152 50	222 24	-7 59	h.
July 2.	7565	182.515	756	0.157	314 26	211 19	252 14	+8 50	M.
	7566		757	0.375	113 23	186 48	227 43	-7 31	a.
	7567		757	0.399	112 27	185 54	226 49	-7 45	b.
	7568		757	0.408	112 47	183 36	224 31	-8 39	c.
4.	7569	184.518	756	0.540	278 18	240 37	253 8	+8 31	N.
	7570		757	0.239	221 48	215 9	227 40	-7 4	a.
	7571		757	0.196	216 23	214 34	227 5	-7 57	a ^o .
5.	7572	185.505	757	0.395	250 18	227 12	225 43	-8 28	B.
	7573		757	0.390	249 21	224 35	223 6	-7 44	b.
6.	7574	186.494	757	0.594	254 58	241 47	226 16	-7 43	A.
7.	7575	187.489	757	0.754	260 1	256 5	226 27	-7 14	a.
9.	7576	189.505	757	0.964	263 17	285 18	227 4	-7 39	M.
10.	7577	190.476	757	0.999	264 38	299 0	227 0	-7 54	M ^o .
12.	7578	192.496	758	0.946	99 29	158 15	57 36	-10 22	A.
13.	7579	193.497	758	0.857	104 37	173 40	58 49	-9 58	A ^o .
16.	7580	196.473	758	0.354	126 14	205 17	48 13	-9 56	a.
19.	7581	199.632	758	0.634	261 42	260 14	58 21	-10 53	a ^o .
20.	7582	200.622	758	0.806	264 49	273 11	57 16	-10 19	a ^o .
21.	7583	201.469	} No spots visible.						
30.	7584	210.466							
Aug. 7.	7585	218.471	759	0.157	70 37	233 40	124 35	+4 16	A.
	7586		759	0.192	68 9	232 14	123 9	+4 48	B.
	7587		759	0.236	65 25	228 2	118 57	+6 35	a.
	7588		759	0.208	71 0	230 55	121 50	+5 43	b.
	7589		759	0.257	74 8	227 26	118 21	+3 4	C.
	7590		759	0.263	78 38	226 26	117 21	+3 16	c.
9.	7591	220.490	759	0.361	291 2	261 9	123 25	+5 0	M.
	7592		759	0.287	290 48	256 4	118 20	+4 11	m.
10.	7593	221.538	759	0.563	290 15	275 4	123 28	+5 37	M ^o .
	7594		759	0.559	289 45	274 25	121 49	+4 8	m ^o .
11.	7595	222.518	759	0.714	289 53	289 46	123 16	+4 20	N.
	7596		759	0.710	289 14	287 8	120 38	+5 51	n.
16.	7597	227.630	760	0.555	102 5	212 19	333 19	+3 25	A.

TABLE III. (continued).

Date.	No.	Mean Time of Sun- picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio- graphical Longitude.	Helio- graphical Latitude.	Spot.
1866. Aug. 16.	7598	227.630	760	0.592	99 36	209 34	330 34	+ 1 37	B.
	7599		760	0.588	102 10	208 55	329 55	- 1 5	C.
	7600		760	0.612	100 16	207 4	328 4	+ 0 46	a.
	7601		760	0.571	102 50	209 27	330 27	+ 0 30	b.
	7602		760	0.622	103 34	213 48	334 48	+ 1 22	c.
17.	7603	228.626	760	0.405	101 26	226 11	333 3	+ 3 32	A ⁰ .
	7604		760	0.436	105 19	224 40	331 32	- 1 22	M.
	7605		760	0.425	102 32	222 19	329 11	+ 2 36	N.
	7606		760	0.426	105 47	225 29	332 21	- 0 16	m.
	7607		760	0.483	103 18	225 45	332 37	- 1 10	u.
	7608		760	0.475	103 34	223 3	329 55	+ 1 57	o.
	7609		760	0.488	104 31	224 38	331 30	+ 0 32	p.
	7610		760	0.492	106 29	221 10	328 2	+ 1 39	q.
18.	7611	229.445	760	0.164	91 59	242 34	337 49	+ 2 15	S.
	7612		760	0.173	95 24	240 58	336 13	+ 1 21	s.
	7613		760	0.205	102 52	238 33	333 48	- 0 18	T.
	7614		760	0.198	99 1	240 8	335 23	- 0 19	t.
	7615		760	0.255	104 58	236 51	332 6	+ 1 32	N ⁰ .
	7616		760	0.276	107 33	235 45	331 0	+ 2 3	P ⁰ .
	7617		760	0.260	106 36	237 8	332 23	- 1 39	n ⁰ .
	7618		760	0.291	109 42	235 37	330 52	- 2 12	p.
20.	7619	231.667	760	0.305	285 34	271 41	335 25	+ 2 38	A.
	7620		760	0.316	288 41	270 5	333 49	- 2 2	a.
	7621		760	0.395	287 18	267 36	331 20	- 0 19	B.
	7622		760	0.371	289 18	269 15	332 59	- 0 25	b.
	7623		760	0.417	290 30	272 20	336 4	+ 1 0	s.
	7624		760	0.425	293 51	266 14	329 58	- 2 16	S.
30.	7625	241.436	761	0.273	309 12	274 2	199 12	+ 6 47	A.
	7626		761	0.278	310 55	274 54	200 4	+ 6 33	a.
31.	7627	242.455	761	0.466	303 6	289 48	200 31	+ 6 27	B.
	7628		761	0.457	304 25	289 7	199 50	+ 7 1	b.
Sept. 1.	7629	243.464	761	0.651	301 30	304 14	200 39	+ 6 9	A ⁰ .
3.	7630	245.461	761	0.940	302 57	332 44	200 48	+ 6 38	A.
	7631		761	0.942	303 17	331 21	199 25	+ 7 11	a.
5.	7632	247.591	No spots visible.						
10.	7633	252.525							
11.	7634	253.470							
13.	7635	255.528							
14.	7636	256.534							
15.	7637	257.457							
17.	7638	259.440							
21.	7639	263.602	762	0.802	99 18	231 51	202 36	+ 7 48	M.
24.	7640	266.508	762	0.306	89 54	272 35	202 7	+ 6 25	M
25.	7641	267.451	762	0.148	40 19	286 19	202 28	+ 7 45	A.
27.	7642	269.598	762	0.473	312 47	316 16	201 58	+ 7 4	A ¹ .
28.	7643	270.526	762	0.609	311 17	329 47	202 19	+ 7 16	A.
Oct. 10.	7644	282.514	No spots visible.						
13.	7645	285.515							
15.	7646	287.479							
	7647		764	0.871	125 48	251 12	243 16	- 14 28	S.
	7648		765	0.894	113 16	247 45	239 49	- 2 22	a.
	7649		765	0.902	113 25	248 0	240 4	- 2 9	b.
16.	7649	288.509	764	0.708	129 14	265 31	242 59	- 14 5	S.
	7650		765	0.754	114 32	262 56	240 24	- 2 36	A.
17.	7651	289.465	764	0.556	136 58	279 7	243 1	- 14 34	s.
	7652		766	0.958	102 51	236 19	200 13	+ 12 9	A.
	7653		766	0.961	103 13	235 32	199 26	+ 13 48	a.

Date.	No.	Mean Time of Sun-picture.	No. of Group in the Kew Catalogue.	Distance from Centre.	Angle of Position.	Longitude from Node.	Helio-graphical Longitude.	Helio-graphical Latitude.	Spot.
1866.									
Oct. 19.	7654	291.596	764	0.208	204° 44'	310° 53'	244° 33'	-13° 2'	A.
	7655		766	0.679	96 57	267 4	200 44	+13 19	B.
24.	7656	296.508	766	0.406	325 8	335 59	199 59	+14 22	a.
26.	7657	298.435	766	0.708	311 5	3 5	199 45	+12 57	a ⁰ .
28.	7658	300.479	766	0.964	311 18	32 24	200 4	+13 14	a ⁰ .
	7659		767	0.309	139 33	304 56	112 36	- 6 5	M.
	7660		767	0.329	136 23	301 43	109 23	- 4 11	m.
	7661		767	0.371	137 10	302 39	110 19	- 5 50	n.
	7662		767	0.388	131 55	299 37	107 17	- 4 4	o.
31.	7663	303.434	767	0.451	279 31	350 17	116 3	- 6 42	M ⁰ .
	7664		767	0.362	281 21	345 39	111 25	- 4 31	N.
	7665		767	0.365	283 7	345 8	110 54	- 3 26	n.
Nov. 2.	7666	305.482	767	0.802	279 8	18 53	115 36	- 5 22	A.
	7667		767	0.761	281 19	14 6	110 49	- 3 39	a.
	7668		767	0.765	284 32	14 28	111 11	- 4 54	a ⁰ .
4.	7669	307.514	No spots visible.						
6.	7670	309.432							
8.	7671	311.529							
14.	7672	317.458							
17.	7673	320.466							
19.	7674	322.474	768	0.936	94 38	263 7	118 48	+13 6	A.
	7675		768	0.937	93 12	260 49	116 30	+13 7	b.
	7676		768	0.949	93 47	262 9	117 50	+14 47	c.
20.	7677	323.504	768	0.830	93 32	276 13	117 18	+13 12	M.
	7678		768	0.846	92 6	276 33	117 38	+13 55	m.
	7679		769	0.958	106 30	263 38	104 53	+ 2 6	O.
21.	7680	324.493	768	0.692	87 16	291 44	118 47	+14 30	M ⁰ .
	7681		769	0.845	104 47	278 48	105 51	+ 1 57	O ⁰ .
25.	7682	328.448	768	0.236	26 11	347 41	118 38	+13 58	A.
	7683		768	0.241	31 47	346 1	116 58	+14 21	a.
	7684		769	0.286	105 49	333 21	104 18	+ 1 54	B.
	7685		769	0.288	106 51	333 13	104 10	+ 2 33	b.
26.	7686	329.476	769	0.236	290 29	348 21	104 44	+ 1 20	S.
	7687		769	0.209	284 31	349 17	105 40	- 0 35	T.
	7688		769	0.211	293 9	348 11	104 34	+ 2 41	s.
	7689		769	0.219	297 30	348 12	104 35	+ 3 26	t.
27.	7690	330.535	769	0.306	331 38	3 25	104 46	+ 2 16	S.
	7691		770	0.494	80 39	324 35	65 56	+ 9 9	a.
	7692		770	0.550	81 51	320 37	61 58	+ 8 12	a.
	7693		770	0.536	80 19	322 57	64 18	+ 8 22	B.
	7694		770	0.556	82 38	319 23	60 44	+ 8 21	b.
28.	7695	331.501	769	0.632	288 52	16 24	104 3	+ 2 9	C.
30.	7696	333.452	769	0.820	286 38	45 41	105 39	+ 1 6	C.
	7697		769	0.814	285 18	44 10	104 8	+ 1 37	

Solar Spotted Area from 1832 to 1868 in Millionths of the Sun's Visible Hemisphere.

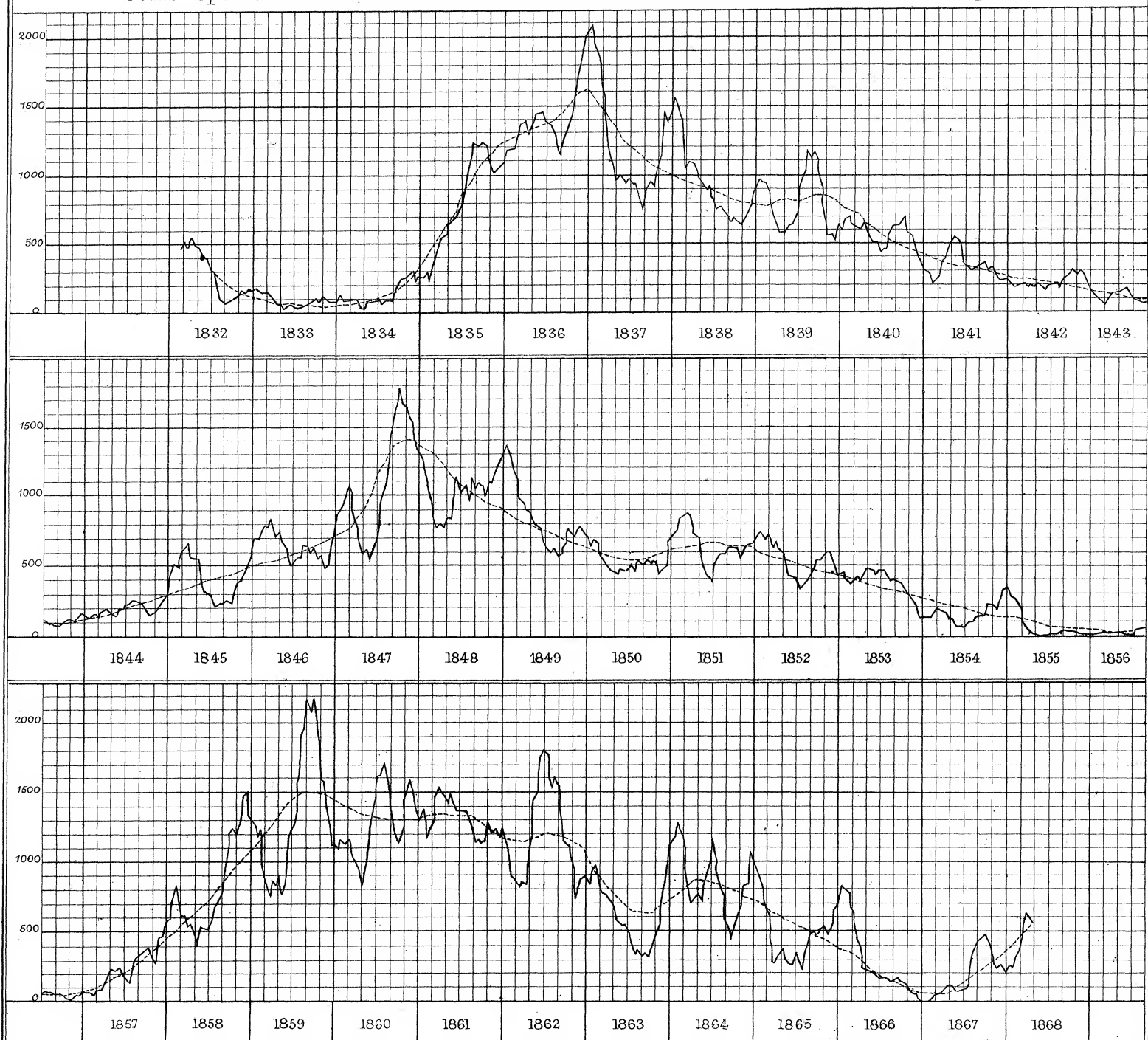


Fig. 1.

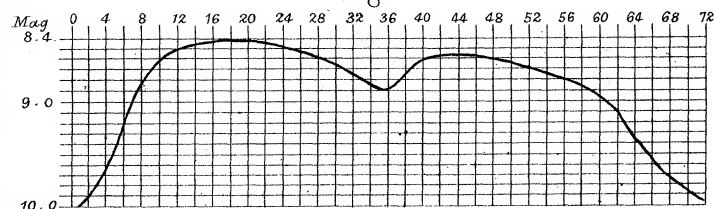


Fig. 2.

